



03- 001R/R

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

MEMORANDUM
September 4, 2003

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended or adopted by the Board of Directors:

REGULATION 3 – Fees, amended July 2, 2003.

REGULATION 12, RULE 11 – FLARE MONITORING, adopted June 4, 2003.

REGULATION 2, RULE 6 – MAJOR FACILITY REVIEW, amended April 16, 2003.

A revised **User's Guide** has also been included with this update. Please insert the User's Guide in the appropriate section at the front of Rules and Regulations, Volume 1.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #02-004-R/R, dated December 13, 2002.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-
4900.**

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FOR THE
JULY 1950
FEDERAL BUREAU OF INVESTIGATION

TO: SAC, NEW YORK

NY 100-100000

FROM: SAC, NEW YORK
SUBJECT: [illegible]

RE: [illegible]

DATE: [illegible]

BY: [illegible]

FOR: [illegible]

FILE: [illegible]

44-100000

100-100000



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

02-004R/R

90 00974 2v

MEMORANDUM
December 13, 2002

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 8, RULE 7 – GASOLINE DISPENSING FACILITIES,
amended November 6, 2002.

REGULATION 8, RULE 5 – STORAGE OF ORGANIC LIQUIDS,
amended November 27, 2002.

REGULATION 8, RULE 18 – EQUIPMENT LEAKS, amended November
27, 2002.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #02-003-R/R, dated October 31, 2002.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-
4900.**

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RECEIVED
October 1, 1967

ALABAMA DEPARTMENT OF REVENUE
BUREAU OF TAXATION

FROM: PUBLIC SERVICE COMPANY OF ALABAMA

DATE OF FILING: 10/1/67

RECEIVED: 10/1/67

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BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

02- 003R/R

90 00974 2v

MEMORANDUM
October 31, 2002

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 8, RULE 16 - SOLVENT CLEANING OPERATIONS,
amended October 16, 2002.

**REGULATION 8, RULE 4 - GENERAL SOLVENT AND SURFACE
COATING OPERATIONS,** amended October 16, 2002.

**REGULATION 8, RULE 14 - SURFACE PREPARATION AND COATING
OF LARGE APPLIANCES AND METAL FURNITURE,** amended October
16, 2002.

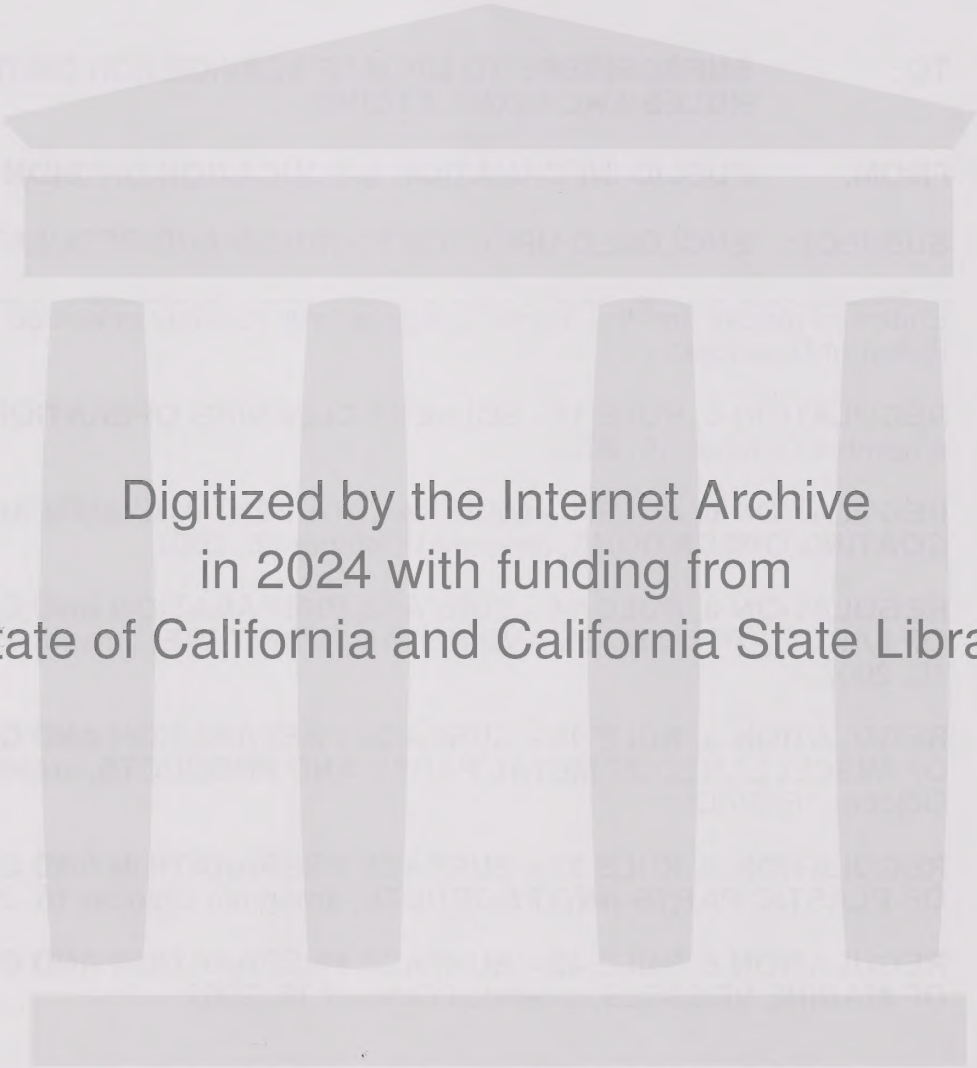
**REGULATION 8, RULE 19 - SURFACE PREPARATION AND COATING
OF MISCELLANEOUS METAL PARTS AND PRODUCTS,** amended
October 16, 2002.

**REGULATION 8, RULE 31 - SURFACE PREPARATION AND COATING
OF PLASTIC PARTS AND PRODUCTS,** amended October 16, 2002.

**REGULATION 8, RULE 43 - SURFACE PREPARATION AND COATING
OF MARINE VESSELS,** amended October 16, 2002.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #02-002-R/R, dated August 8, 2002.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-
4900.**



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BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

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02- 002R/R

MEMORANDUM

August 8, 2002

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 9, RULE 10 – NITROGEN OXIDES AND CARBON MONOXIDE FROM BOILERS, STEAM GENERATORS AND PROCESS,
amended July 17, 2002.

REGULATION 8, RULE 51 – ADHESIVE AND SEALANT PRODUCTS,
amended July 17, 2002

REGULATION 3 – FEES, amended June 5, 2002.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #02-001-R/R, dated April 16, 2002.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-
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BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

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02- 001R/R

MEMORANDUM
April 16, 2002

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 5- OPEN BURNING, amended March 6, 2002.

REGULATION 8, RULE 3 -ARCHITECTURAL COATINGS, amended November 21, 2001.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #01-002-R/R, dated September 25, 2001.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-
4900.**

02-00-0000

MEMORANDUM
April 12, 2000

TO: SUBCOMMITTEE TO IMPROVE SERVICE FOR DISTRICT
RULES AND REGULATIONS

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSURE RELATES TO RULES AND REGULATIONS

Enclosed please find the following information for your review and
comment.

REGULATIONS & OTHER INFORMATION

REGULATION & RULES & REGULATIONS
Enclosure 1-2000

For more information, please contact the Public Information & Education
Division at (202) 452-2000.

FOR REGULATION & INFORMATION
PUBLIC INFORMATION & EDUCATION DIVISION
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BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

01-002R/R

MEMORANDUM
September 25, 2001

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 2, RULE 1 – GENERAL REQUIREMENTS, amended August 1, 2001

REGULATION 3– FEES, amended August 1, 2001.

REGULATION 9, RULE 8 – NITROGEN OXIDES AND CARBON MONOXIDE FROM STATIONARY INTERNAL COMBUSTION ENGINES, amended August 1, 2001.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #00-001-R/R, dated June 7, 2001.

FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

01- 001R/R

**MEMORANDUM
JUNE 7, 2001**

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

**REGULATION 8, RULE 43 – SURFACE COATING OF MARINE
VESSELS, amended April 18, 2001.**

**REGULATION 1 – GENERAL PROVISIONS AND DEFINITIONS,
amended May 2, 2001.**

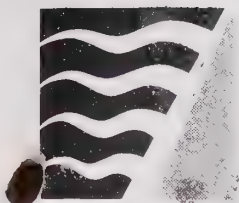
**REGULATION 2, RULE 1 – GENERAL REQUIREMENTS, amended May
2, 2001.**

**REGULATION 2, RULE 6 - MAJOR FACILITY REVIEW, amended May
2, 2001.**

**REGULATION 8, RULE 51 - ADHESIVE AND SEALANT PRODUCTS,
amended May 2, 2001.**

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #00-004-R/R, dated December 29, 2001.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-
4900.**



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

00-003R/R

MEMORANDUM
June 21, 2000

TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulation, recently amended by the Board of Directors:

REGULATION 3 – FEES, amended May 17, 2000.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #00-002-R/R, dated June 6, 2000.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.**



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

00-002R/R

MEMORANDUM

June 6, 2000

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 1 – GENERAL PROVISIONS AND DEFINITIONS, amended May 17, 2000.

REGULATION 2, RULE 1 – GENERAL REQUIREMENTS, amended May 17, 2000.

REGULATION 2, RULE 2 – NEW SOURCE REVIEW, amended May 17, 2000.

REGULATION 2, RULE 4 – EMISSIONS BANKING, amended May 17, 2000.

REGULATION 9, RULE 11 – NITROGEN OXIDES AND CARBON MONOXIDE FROM ELECTRIC POWER GENERATING STEAM BOILERS, amended May 17, 2000.

REGULATION 11, RULE 9 – ETHYLENE OXIDE STERILIZERS, amended May 17, 2000.

REGULATION 10 – STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES, amended February 16, 2000.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #00-001-R/R, dated March 20, 2000.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.**



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

00-001R/R

MEMORANDUM

March 20, 2000

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

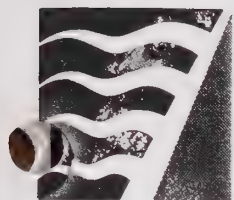
REGULATION 8, RULE 5 – STORAGE OF ORGANIC LIQUIDS,
amended December 15, 1999.

**REGULATION 8, RULE 40 – AERATION OF CONTAMINATED SOIL AND
REMOVAL OF UNDERGROUND STORAGE TANKS,** amended December
15, 1999

REGULATION 8, RULE 7 – GASOLINE DISPENSING FACILITIES,
amended November 17, 1999.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #99-005-R/R, dated November 19, 1999.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.**



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

99-005R/R

MEMORANDUM
November 19, 1999

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 8, RULE 34 – SOLID WASTE DISPOSAL SITES, amended October 6, 1999.

REGULATION 9, RULE 2 -- HYDROGEN SULFIDE, amended October 6, 1999.

REGULATION 3 - FEES, amended October 20, 1999.

REGULATION 2, RULE 1 – GENERAL REQUIREMENTS, amended October 20, 1999.

REGULATION 2, RULE 2 – NEW SOURCE REVIEW, amended October 20, 1999.

REGULATION 2, RULE 6 – MAJOR FACILITY REVIEW, amended October 20, 1999.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #99-004-R/R, dated August 10, 1999.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.**



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

99-005R/R

MEMORANDUM
November 19, 1999

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently amended by the Board of Directors:

REGULATION 8, RULE 34 – SOLID WASTE DISPOSAL SITES, amended October 6, 1999.

REGULATION 9, RULE 2 – HYDROGEN SULFIDE, amended October 6, 1999.

REGULATION 3 - FEES, amended October 20, 1999.

REGULATION 2, RULE 1 – GENERAL REQUIREMENTS, amended October 20, 1999.

REGULATION 2, RULE 2 – NEW SOURCE REVIEW, amended October 20, 1999.

REGULATION 2, RULE 6 – MAJOR FACILITY REVIEW, amended October 20, 1999.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #99-004-R/R, dated August 10, 1999.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.**



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

99-002R/R

MEMORANDUM

May 19, 1999

**TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS**

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulations, recently adopted or amended by the Board of Directors:

REGULATION 2, RULE 9 – INTERCHANGEABLE EMISSION REDUCTION CREDITS, adopted April 7, 1999.

REGULATION 8, RULE 20 – GRAPHIC ARTS PRINTING AND COATING OPERATIONS, amended March 3, 1999.

A revised **User's Guide** has also been included with this update. Please insert the User's Guide in the appropriate section at the front of Rules and Regulations, Volume 1.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #99-001-R/R, dated February 10, 1999.

FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

99-001R/R

MEMORANDUM
February 10, 1999

TO: SUBSCRIBERS TO UPDATE SERVICE FOR DISTRICT
RULES AND REGULATIONS

FROM: PUBLIC INFORMATION & EDUCATION DIVISION

SUBJECT: ENCLOSED UPDATES TO RULES AND REGULATIONS

Enclosed please find the following regulation, recently adopted by the Board of Directors:

REGULATION 1, RULE 2 – NOTICE TO COMPLY adopted February 3, 1999.

A revised **User's Guide** has also been included with this update. Please insert the User's Guide in the appropriate section at the front of Rules and Regulations, Volume 1.

For the benefit of interested subscribers, the last update memorandum for Rules and Regulations was #98-008-R/R, dated January 8, 1999.

**FOR REGULATION AMENDMENT INQUIRIES, PLEASE CALL THE
PUBLIC INFORMATION AND EDUCATION DIVISION AT (415) 749-4900.**

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BAY AREA AIR QUALITY MANAGEMENT DISTRICT

RULES and REGULATIONS



Adopted by the Board of Directors of the Bay Area Air Quality Management District, on September 5, 1979 and December 19, 1979 to become effective on January 1, 1980.

USER'S GUIDE
BAY AREA AIR QUALITY MANAGEMENT DISTRICT
REGULATIONS

The User's Guide is intended to help persons understand the content and format of District Rules and Regulations. The District will issue new editions of the User's Guide from time to time, when warranted by additions and other changes. This document does not receive the specific approval of the Board of Directors and should not be considered to be part of the District regulatory structure.

The section numbering format is consistent throughout all regulations. The first digit represents the regulation number, followed by a dash (-), and the last 3 digits represent the section number of the regulation (e.g., 3-200 indicates Regulation 3, Section 200). Those regulations subdivided into rules have a middle digit representing the rule number (e.g., 8-3-300 indicates Regulation 8, Rule 3, Section 300).

In order to facilitate use of the regulations, the section numbers will designate the same subjects in each regulation as follows:

- 100 series - General
- 200 series - Definitions
- 300 series - Standards
- 400 series - Administrative Requirements
- 500 series - Monitoring and Records
- 600 series - Manual of Procedures references

Not all the above series are applicable to every rule and regulation, so the relevant series numbers will not be used in those cases. When a series is not applicable, the series number will appear in the index for that rule or regulation followed by the words "Not Included". However, other regulations and/or rules may include pertinent provisions, exemptions and requirements.

The Manual of Procedures includes laboratory analytical procedures and other technical information which will be used to determine compliance with the District's Rules and Regulations. Where indicated, references are to District Regulations (i.e., Ref. Reg. 4-400). Following is a list of the contents of the Manual of Procedures:

- Volume I - Enforcement Procedures
- Volume II - Engineering Permitting Procedures
- Volume III - Laboratory Policy and Procedures
- Volume IV - Source Test Policy and Procedures
- Volume V - Continuous Emission Monitoring Policy and Procedures
- Volume VI - Air Monitoring Procedures
- Volume VII - Guidelines for Environmental Processes under the California Environmental Quality Act

Following is a list of abbreviations that may be used throughout the regulations:

BTU =	British Thermal Unit
bbl =	barrel
cm =	centimeter
cu m =	cubic meter
dscf =	dry standard cubic foot
dscm =	dry standard cubic meter
ft =	foot
ft ³ =	cubic foot
g =	gram
gal =	gallon
GJ =	gigajoule - 1 billion (10 ⁹) joules
gr =	grain
hp =	horsepower
in =	inch
in ² =	square inches
in ³ =	cubic inches
j =	joule
kc =	kilocalorie
kg =	kilogram
kw =	kilowatts
l =	liter
lb =	pound
m =	meter
m ² =	square meter
mm =	millimeter
mm Hg =	millimeter of mercury
mw =	megawatt
N =	Newton
ng =	nanogram
psia =	pounds per square inch, absolute
psig =	pounds per square inch, gauge
T =	English (short) ton

District regulations are codified as follows:

REGULATION 1 - GENERAL PROVISIONS AND DEFINITIONS: The provisions and definitions in this Regulation are applicable to all District regulations and are in addition to the provisions and definitions in particular rules and regulations.

Rule 2 - Notice to Comply

REGULATION 2 - PERMITS: The Regulation specifies the requirements for authorities to construct and permits to operate.

Rule 1 - General Requirements

Rule 2 - New Source Review

Rule 3 - Power Plants

Rule 4 - Emissions Banking

Rule 5 - (not yet adopted)

Rule 6 - Major Facility Review, Title V

Rule 7 - Acid Rain

Rule 8 – (not yet adopted)

Rule 9 –Interchangeable Emission Reduction Credits

REGULATION 3 - FEES: This Regulation covers District Permit Fees and Hearing Board Fees.

REGULATION 4 - AIR POLLUTION EPISODE PLAN: This Regulation governs the actions to be taken in the event of an air pollution advisory/alert, warning or emergency.

REGULATION 5 - OPEN BURNING: This Regulation forbids open burning within the District, with certain exceptions.

REGULATION 6 - PARTICULATE MATTER AND VISIBLE EMISSIONS: This Regulation limits particulate matter by emission rates and visible emissions.

REGULATION 7 - ODOROUS SUBSTANCES: This Regulation establishes general limitations on odorous substances and specific limitations on certain odorous compounds.

REGULATION 8 - ORGANIC COMPOUNDS: This Regulation limits organic pollutants as designated in the following rules:

- Rule 1 - General Provisions
- Rule 2 - Miscellaneous Operations
- Rule 3 - Architectural Coatings
- Rule 4 - General Solvent and Surface Coating Operations
- Rule 5 - Storage of Organic Liquids
- Rule 6 - Terminals and Bulk Plants
- Rule 7 - Gasoline Dispensing Facilities
- Rule 8 - Wastewater (Oil-Water) Separators
- Rule 9 - Vacuum Producing Systems
- Rule 10 - Process Vessel Depressurization
- Rule 11 - Metal Container, Closure and Coil Coating
- Rule 12 - Paper, Fabric and Film Coating
- Rule 13 - Light and Medium Duty Motor Vehicle Assembly Plants
- Rule 14 - Surface Coating of Large Appliances and Metal Furniture
- Rule 15 - Emulsified and Liquid Asphalts
- Rule 16 - Solvent Cleaning Operations
- Rule 17 - Petroleum Dry Cleaning Operations
- Rule 18 - Equipment Leaks
- Rule 19 - Surface Coating of Miscellaneous Metal Parts and Products
- Rule 20 - Graphic Arts Printing and Coating Operations
- Rule 21 - Rubber Tire Manufacturing Operations
- Rule 22 - Valves and Flanges at Chemical Plants
- Rule 23 - Coating of Flat Wood Paneling and Wood Flat Stock
- Rule 24 - Pharmaceutical and Cosmetic Manufacturing Operations
- Rule 25 - Deleted January 7, 1998
- Rule 26 - Magnet Wire Coating Operations
- Rule 27 - Synthetic Solvent Dry Cleaning Operations
- Rule 28 - Episodic Releases From Pressure Relief Devices at Petroleum Refineries and Chemical Plants
- Rule 29 - Aerospace Assembly and Component Coating Operations
- Rule 30 - Semiconductor Wafer Fabrication Operations
- Rule 31 - Surface Coating of Plastic Parts and Products
- Rule 32 - Wood Products Coatings
- Rule 33 - Gasoline Bulk Terminals and Gasoline Delivery Vehicles
- Rule 34 - Solid Waste Disposal Sites
- Rule 35 - Coating, Ink and Adhesive Manufacturing
- Rule 36 - Resin Manufacturing
- Rule 37 - Natural Gas and Crude Oil Production Facilities
- Rule 38 - Flexible and Rigid Disc Manufacturing
- Rule 39 - Gasoline Bulk Plants and Gasoline Delivery Vehicles
- Rule 40 - Aeration of Contaminated Soil and Removal of Underground Storage Tanks
- Rule 41 - Vegetable Oil Manufacturing Operations

Rule 42 - Large Commercial Bread Bakeries
Rule 43 - Surface Coating of Marine Vessels
Rule 44 - Marine Vessel Loading Terminals
Rule 45 - Motor Vehicle and Mobile Equipment Coating Operations
Rule 46 - Marine Tank Vessel to Marine Tank Vessel Loading
Rule 47 - Air Stripping and Soil Vapor Extraction Operations
Rule 48 - Deleted
Rule 49 - Aerosol Paint Products
Rule 50 - Polyester Resin Operations
Rule 51 - Adhesive and Sealant Products
Rule 52 - Polystyrene, polypropylene and polyethylene Foam Product Manufacturing Operations

REGULATION 9 - INORGANIC GASEOUS POLLUTANTS: This Regulation limits inorganic gaseous pollutants as designated in the following rules:

Rule 1 - Sulfur Dioxide
Rule 2 - Hydrogen Sulfide
Rule 3 - Nitrogen Oxides from Heat Transfer Operations
Rule 4 - Nitrogen Oxides from Fan Type Residential Central Furnaces
Rule 5 - Hydrogen Sulfide from Geothermal Power Plants
Rule 6 - Nitrogen Oxides Emissions from Natural Gas-Fired Water Heaters
Rule 7 - Nitrogen Oxides And Carbon Monoxide from Industrial, Institutional, and Commercial Boilers, Steam Generators, And Process Heaters
Rule 8 - Nitrogen Oxides And Carbon Monoxide from Stationary Internal Combustion Engines
Rule 9 - Nitrogen Oxides And Carbon Monoxide from Stationary Gas Turbines
Rule 10 - Nitrogen oxides And Carbon Monoxide From Boilers, Steam Generators And Process Heaters in Petroleum Refineries
Rule 11 - Nitrogen Oxides And Carbon Monoxide from Utility Electric Power Generating Boilers
Rule 12 - Nitrogen Oxides From Glass Melting Furnaces

REGULATION 10 - STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES: This Regulation establishes emission and/or performance standards for new plants and other sources by reference to the provisions of Part 60, Chapter 1, Title 40, of the Code of Federal Regulations.

REGULATION 11 - HAZARDOUS POLLUTANTS: This Regulation establishes emission and/or performance standards for hazardous pollutants as designated in the following rules:

Rule 1 - Lead
Rule 2 - Asbestos Demolition, Renovation and Manufacturing
Rule 3 - Beryllium
Rule 4 - Beryllium Rocket Motor Firing
Rule 5 - Mercury
Rule 6 - Vinyl Chloride
Rule 7 - Benzene
Rule 8 - Hexavalent Chromium
Rule 9 - Ethylene Oxide Sterilizers
Rule 10 - Hexavalent Chromium Emissions From Cooling Towers
Rule 11 - National Emission Standard For Benzene Emissions From Coke By-Product Recovery Plants and Benzene Storage Vessels
Rule 12 - National Emission Standard For Benzene Emissions From Benzene Transfer Operations and Benzene Waste Operations
Rule 13 - Medical Waste Incinerators
Rule 14 - Asbestos-Containing Serpentine
Rule 15 - Airborne Toxic Control Measure For Emissions of Toxic Metals From Non-Ferrous Metal Melting
Rule 16 - Perchloroethylene And Synthetic Solvent Dry Cleaning Operations

REGULATION 12 - MISCELLANEOUS STANDARDS OF PERFORMANCE: This Regulation establishes emission and/or performance standards for plants and operations that are not otherwise included in District regulations, as designated in the following rules:

- Rule 1 - Kraft Pulp Mills
- Rule 2 - Rendering Plants
- Rule 3 - Asphalt Air Blowing
- Rule 4 - Sandblasting
- Rule 5 - Phosphate Fertilizer Plants
- Rule 6 - Acid Mist From Sulfuric Acid Plants
- Rule 7 - Motor Vehicle Air Conditioner Refrigerant
- Rule 8 - (not yet adopted)
- Rule 9 - (not yet adopted)
- Rule 10 - Oleum Transfer Operations
- Rule 11 – Flare Monitoring At Petroleum Refineries

REGULATION 1 GENERAL PROVISIONS AND DEFINITIONS

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- 1-222 Plant
- 1-223 ppmv
- 1-224 Reconstruction
- 1-225 Sampling Point
- 1-226 Sea Level Atmospheric Pressure
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- 1-231 Type B Emission Point
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- 1-233 Organic Compound
- 1-234 Organic Compound, Non-Precursor
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REGULATION 1

GENERAL PROVISIONS AND DEFINITIONS

(Adopted September 5, 1979)

1-100 GENERAL

- 1-101 Description:** The general provisions and definitions included in Regulation 1 shall apply to all other District Rules and Regulations. Definitions which are included in any other District Rule or Regulation are specific to that Rule or Regulation and shall not apply to any other Rule or Regulation.
- 1-102 More than One Emission Standard:** Where a person is subject to more than one emission standard for the same air contaminant, the more stringent shall apply.
- 1-103 Violations Not Authorized:** Nothing in District Rules or Regulations is intended to permit any practice in violation of any statute, ordinance, Rule or Regulation.
- 1-104 Circumvention Not Permitted:** A person shall not undertake or authorize any practice intended or designed to evade or circumvent District Rules or Regulations.
- 1-105 Regulations Not Intended to Apply to Workroom Atmosphere:** District Regulations are not intended to apply to the air quality requirements for the workroom atmosphere necessary to protect an employee's health from contaminants emitted by the source; nor are they concerned with the occupational health factors in an employer-employee relationship.
- 1-106 Separation of Emissions:** Where air contaminants from a single source are emitted through two or more emission points, the total quantity of air contaminants thus emitted shall not exceed the quantity allowable through a single emission point.
- 1-107 Combination of Emissions:** Where air contaminants from two or more sources are combined prior to emission and there are no adequate and reliable means to establish the nature, extent and quantity of emission from each source, District Regulations shall be applied to the combined emission as if it originated in a single source. Such emissions shall be subject to the most stringent limitations and requirements of District Regulations applicable to any of the sources whose air contaminants are so combined.
- 1-108 Metric Governs:** When units of weight or measure are expressed in both the international system (SI) of metric units and English units, the metric units are the standard and the English units are approximations to be used for guidance only.
(Amended May 17, 2000)
- 1-109 Severability:** If any District Rule or Regulation, or portion thereof, is adjudged by a court of competent jurisdiction to be unconstitutional or otherwise invalid, such judgment shall be limited to that Rule, Regulation or portion thereof, and not otherwise affect or invalidate the remainder of District Rules and Regulations.
- 1-110 Exclusions:** District Regulations shall not apply to the following:
- 110.1 Engines used to propel motor vehicles, and defined by the Vehicle Code of the State of California.
 - 110.2 Deleted May 17, 2000.
 - 110.3 Aircraft.
 - 110.4 Fires from residential heating and residential cooking.
 - 110.5 Open outdoor fires, other than for the disposal of waste propellants, explosives or pyrotechnics by manufacturing facilities; recreational fires and outdoor cooking fires, except as limited by Regulation 5.
 - 110.6 Any emission point which is not an intended opening and from which no significant quantities of air contaminants are emitted.
 - 110.7 Smoke generators intentionally operated to train observers in appraising the shade of emissions.
 - 110.8 Air contaminants, where purposely emitted for the sole purpose of a specific beneficial use, and where essentially all of the air contaminants are confined to the area in which such beneficial use is obtained. The quantity and nature

of the air contaminants, and the proportion of air contaminants used in relation to amounts of other materials involved in the beneficial use of air contaminants, shall conform to accepted practice in type of use employed.

- 110.9 Emissions arising from agriculture operations necessary for the growing of crops or the raising of fowl or animals, except as limited by Regulation 5, and as allowed by state law for Title V permits.

(Renumbered 3/17/82; Amended 12/19/90; 11/3/93; 5/17/00; 5/2/01)

1-111 **Deleted, October 7, 1998**

1-112 **Breakdown:** The APCO may refrain from enforcing the provisions of District regulations for excesses of emissions resulting from the breakdown of air pollution abatement equipment or operating equipment provided such emissions do not interfere with the attainment or maintenance of any national or California ambient air quality standard and further provided that the persons responsible for such emissions comply with the administrative requirements of Section 1-431 and 432.

(Amended March 17, 1982)

1-113 **Discretionary Enforcement, Breakdown:** If excessive emissions resulting from the breakdown of air pollution abatement equipment or operating equipment persist until the end of a production run or up to 24 hours, whichever is sooner, a violation of District regulations shall be deemed to have occurred. However, the APCO may elect to take no enforcement action if the person responsible for the emissions shows that appropriate corrective measures have been taken and that emissions are either in compliance or that the equipment has been shut down either before the next production run or within 24 hours, whichever is sooner.

1-114 **Exemption, Uncombined Water:** Where the presence of uncombined water is the only reason for the failure of a visible emission to meet District limitations, those limitations shall not apply. The burden of proof to establish the application of this section shall be upon the person seeking to come within its provisions.

1-115 **Exemption, Modification to Meet Emission Standards:** When permits are necessary for modifying an existing source in order to comply with emission regulations such modifications shall not subject the existing source to emission standards for new or modified plants as set forth in Section 2-2-301 or 2-2-302 or 2-2-303 of Regulation 2, Permits.

(Amended December 17, 1980)

1-116 **Definitions:** Definitions that are specific to a Rule or Regulation shall take precedence over more general definitions.

116.1 A definition contained in a Rule shall apply to that Rule. Lacking such a definition,

116.2 A definition contained in Rule 1 of a regulation shall apply to all Rules of the Regulation. Lacking such a definition,

116.3 A definition contained in Regulation 1 shall apply to all District Regulations.

(Adopted May 17, 2000)

1-200 **DEFINITIONS**

1-201 **Air Contaminant or Air Pollutant:** Any material which, when emitted, causes or tends to cause the degradation of air quality. Such material includes, but is not limited to, smoke, charred paper, dust, soot, grime, carbon, fumes, gases, odors, particulate matter, acids or any combination thereof.

1-202 **Air Pollution Control Equipment:** Any equipment, the operation of which has as its primary purpose a significant reduction in either the emission of air contaminants or the effects of such emissions.

1-203 **APCO:** The Air Pollution Control Officer of the Bay Area Air Quality Management District or the designee thereof.

1-204 **ARB:** The Air Resources Board of the State of California.

1-205 **Atmosphere:** The air that surrounds the earth, excluding the general volume of gases contained within any building or structure if the APCO determines that emissions within such building or structure do not escape to the outside air.

(Amended March 17, 1982)

- 1-206 **BAR:** 100,000 pascals (100,000 N/m²).
- 1-207 **Best Modern Practices:** The minimization of emissions from equipment and operations by the employment of modern maintenance and operating practices used by superior operators of like equipment and which may be reasonably applied under the circumstances.
- 1-208 **Breakdown (malfunction):** Any unforeseeable failure or malfunction of any air pollution control equipment or operating equipment which causes a violation of any emission standard or limitation prescribed by District, California or federal rules, regulations or laws, where such failure or malfunction:
- 208.1 Is not the result of intent, neglect, or disregard of any air pollution control law, rule or regulation;
- 208.2 Is not the result of improper maintenance;
- 208.3 Does not constitute a nuisance;
- 208.4 Is not an excessively recurrent breakdown of the same equipment.
- 1-209 **Commenced:** Where a person has undertaken a continuous program of construction, reconstruction or modification, or a person has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction, reconstruction or modification.
- 1-210 **Construction:** Fabrication, erection or installation of a plant.
- 1-211 **Discharge:** To permit, let, suffer or allow an emission.
- 1-212 **District:** The Bay Area Air Quality Management District.
- 1-213 **Emission or Emissions:** A gas or liquid stream containing one or more air contaminants. The verb form, emit, means the act of discharging an emission into the atmosphere.
- 1-214 **Emission Point:** The location (place in horizontal plane and vertical elevation) at which an emission enters the atmosphere.
- 1-215 **Facility:** Any property, real or personal, which may incorporate one or more plants all being operated or maintained by a person as part of an identifiable business on contiguous or adjacent property, and shall include, but not be limited to manufacturing plants, refineries, power generating plants, ore processing plants, construction material processing plants, automobile assembly plants, foundries and waste processing sites.
- 1-216 **Fixed Capital Cost:** The capital needed to provide all the depreciable components of a plant.
- 1-217 **Modification:** Any physical change in existing plant or change in the method of operation which results or may result in either an increase in emission of any air pollutant subject to District control, or the emission of any such air pollutant not previously emitted. The following shall not be regarded as physical changes or changes in the method of operation:
- 217.1 Routine maintenance, repair or replacement with identical or equivalent equipment.
- 217.2 Increased production rate or increased hours of operation where there is no increase in fixed capital cost, unless such production and hours are limited by permit conditions.
- 1-218 **Opacity:** The decrease in the transmission of light through a gas stream, as indicated by the expression $(1-P/P_o)$ where P_o is the radiant power initially directed at the emission being measured, and P is the radiant power received after passing through the emission. (Amended May 21, 1980)
- 1-219 **Operation:** Any physical action resulting in a change in the location, form, or physical properties of a material, or any chemical action resulting in a change of the chemical composition, or chemical or physical properties of a material. The following are given as examples, without limiting the generality of the foregoing: heat transfer, calcination, double decomposition, fermentation, pyrolysis, electrolysis, combustion, material handling, evaporation, mixing, absorption, filtration, screening and fluidization.
- 219.1 Heat transfer operation means any operation which (a) involves the combustion of fuel for the principal purpose of utilizing the heat of

- combustion-product gases by the transfer of such heat to the process material; and (b) does not transfer a significant portion of heat by direct contact between the combustion-product gases and the process material.
- 219.2 Incineration operation means any operation in which combustion is carried on for the principal purpose, or with the principal result, of oxidizing a liquid or solid waste material to reduce its bulk or facilitate disposal or both of such.
- 219.3 Salvage operation means any operation in which combustion is carried out for the primary purpose or result of salvaging metals, where the principal metal to be salvaged is not melted. Other metals present in small quantities may be melted.
- 219.4 General operation means any operation other than those defined in Sections 1-219.1, 219.2 or 219.3.
- 1-220 Operating Day:** A 24 hour time period from midnight to midnight.
(Amended May 17, 2000)
- 1-221 Person:** Any natural person, corporation, government agency, public officer, association, joint venture, partnership or any combination of such or such entities as are included in Section 39047, California Health and Safety Code.
- 1-222 Plant:** The machinery and equipment, including tanks, necessary to carry out an operation.
- 1-223 ppmv:** Parts per million by volume.
- 1-224 Reconstruction:** Replacement of the components of an existing plant to such an extent that the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable, entirely new plant.
- 1-225 Sampling Point:** The location in a Type A emission point where the measurements of flow volume and contaminant concentrations can be made which are representative of the actual flow volume and contaminant concentrations.
- 1-226 Sea Level Atmospheric Pressure:** 1.01 bar or 101 kilo pascals (14.7 psia).
- 1-227 Source:** Any operation that produces and/or emits air pollutants.
- 1-228 Standard Conditions:** A sea level atmospheric pressure and a temperature of 21 degrees Celsius (70 degrees Fahrenheit).
- 1-229 Standard Dry Cubic Meter:** One m³ of gas free of water vapor and at standard conditions.
- 1-230 Type A Emission Point:** An emission point, having sufficiently regular geometry so that both flow volume and contaminant concentrations can be measured and where the nature and extent of air contaminants do not change substantially between a sampling point and the emission point.
- 1-231 Type B Emission Point:** An emission point other than a type A emission point.
- 1-232 Visible Emissions:** Emissions which are visually perceived by an observer. Restrictions on visible emissions in District Regulations are expressed as numbers on the Ringelmann Chart as published by the United States Bureau of Mines. Emissions may not be as dark or darker than the designated number on the Ringelmann Chart, or cannot be of such opacity as to obscure a trained observer's view to an equivalent or greater degree. Where the presence of uncombined water is the only reason for the failure of an emission to meet District limitations, those limitations shall not apply (see Section 1-114).
- 1-233 Organic Compound:** Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate.
(Adopted March 17, 1982)
- 1-234 Organic Compound, Non-Precursor:** Methylene chloride, 1,1,1, trichloroethane, 1,1,2 trichlorotrifluoroethane (CFC-113), trichlorofluoromethane (CFC-11), dichlorodifluoromethane (CFC-12), dichlorotetrafluoroethane (CFC-114), and chloropentafluoroethane (CFC-115). In addition, any compound designated as having a negligible contribution to photochemical reactivity by the U.S. Environmental Protection Agency as published in the Federal Register shall be considered a Non-Precursor Organic Compound.
(Adopted 3/17/82; Amended 9/2/98)
- 1-235 Organic Compound, Precursor:** Any organic compound as defined in 1-233 excepting the non-precursor organic compounds, 1-234. (Adopted March 17, 1982)

- 1-236 Volatile Organic Compound (VOC):** Any organic compound, as described in Section 1-233, which would be emitted during use, processing, application, curing or drying of a solvent, surface coating, or other material. (Adopted October 19, 1983)
- 1-237 Reduced Sulfur Compounds:** All organic and inorganic sulfide compounds and mercaptans. (Adopted October 19, 1983)
- 1-238 Parametric Monitor:** Any monitoring device or system required by District permit condition or regulation to monitor the operational parameters of either a source or an abatement device. Parametric monitors may record temperature, gauge pressure, flowrate, pH, hydrocarbon breakthrough, or other factors. (Adopted Sept. 2, 1998)
- 1-239 Continuous Emission Monitor:** Any monitoring device or system, required by Regulation 1-520 and 521. (Adopted September 2, 1998)
- 1-240 Abatement Device:** Any equipment or process whose sole purpose is to reduce the amount of one or more pollutants from the source.
(Adopted 10/7/98; Amended 5/17/00)
- 1-241 Owner or Operator:** Any person who owns, leases, operates, controls, or supervises a facility, building, structure, installation, or source which directly or indirectly results or may result in emissions of any air pollutant.
(Adopted May 17, 2000)
- 1-242 Parametric Emission Monitoring System:** A monitoring system that continuously measures process parameters and uses a computer model to estimate emissions based on the parameters measured. Usually used as an equivalent to, and in lieu of, direct measurement of emissions using a continuous emission monitor.
(Adopted May 17, 2000)

1-300 STANDARDS

- 1-301 Public Nuisance:** No person shall discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or the public; or which endangers the comfort, repose, health or safety of any such persons or the public, or which causes, or has a natural tendency to cause, injury or damage to business or property. For purposes of this section, three or more violation notices validly issued in a 30 day period to a facility for public nuisance shall give rise to a rebuttable presumption that the violations resulted from negligent conduct.
(Adopted 3/17/81; Amended 5/2/90)

1-400 ADMINISTRATIVE REQUIREMENTS

- 1-401 Violation Notice:** A notice of violation or citation shall be issued by the District for all violations of District regulations and shall be delivered to persons alleged to be in violation of District regulations. The notice shall identify the nature of the violation, the rule or regulation violated, and the date or dates on which said violation occurred.
- 1-402 Status of Violation Notices During Variance Proceedings:** Except as provided below, where a person has applied for a variance, no notices shall be issued during the period between the date of filing for the variance application and the date of decision by the Hearing Board for violations covered by the variance application. However, during the period between the date of the filing for a variance and the date of the decision by the Hearing Board, evidence of additional violations shall be collected and duly recorded. Where the variance is denied, evidence of violations collected between the filing date and decision date shall be reviewed and a notice of violation issued for violations occurring during that period shall be served upon said person. Where the variance is granted, no notice of violation shall be issued for violations occurring during that period except in extraordinary circumstances as determined by the APCO.
- 402.1 Notwithstanding the foregoing, when the Hearing Board's proceedings on a variance application will require more than one day of hearing time, any party to the proceeding may request, or the Hearing Board on its own motion may

require, that the provisions of this Section 1-402 shall not apply to any violations occurring during the course of the variance proceeding unless and until the applicant has satisfied the good cause standard for the granting of an interim variance, as provided in Health and Safety Code Section 42351. In the event that a variance is eventually granted in such a case, the Air Pollution Control Officer may rescind any notices of violation issued during the course of the variance proceeding. (Adopted October 21, 1992)

- 1-410 Registration:** A person responsible for the emission of air contaminants shall register with the District on forms provided by the APCO, and shall thereafter provide any information requested by the APCO regarding such emissions to the District on an annual basis. Plants or facilities requiring annual operating permits are exempt from registration.
- 1-411 Permits May Be Needed:** Registration with the District shall not relieve a person from the requirements of Regulation 2, Permits, where applicable.
- 1-412 Address For Service:** A person registered with the District may be served notices, including notices of hearings before the Hearing Board, by certified mail addressed to the address contained in the registration form on file with the District.
- 1-420 Emission Source Data:** Upon the request of the APCO, a person responsible for the emission of air contaminants shall provide the District with any data concerning emissions from any operation under such person's control. The data shall be in such form as prescribed by the APCO, who may require that such data be certified by a registered professional engineer.
- 1-430 Breakdown Procedures:** The APCO shall establish written procedures to insure that all reported breakdown occurrences are handled uniformly to final disposition.
- 1-431 Breakdown Report:** A person seeking relief pursuant to Section 1-112 shall notify the APCO of the breakdown condition immediately, with due regard for public safety, including the hazard of fire and explosion. Such notification shall include the time, specific location, equipment involved and to the extent possible the cause of the breakdown.
- 1-432 Written Breakdown Report:** Within 30 days of the occurrence of a breakdown, the person responsible shall submit a written report to the APCO including the following:
- 432.1 Sufficient information to enable the APCO to determine whether or not a breakdown occurred and the cause of the breakdown;
 - 432.2 A summary of the corrective action taken following the breakdown;
 - 432.3 Present status of the breakdown, and
 - 432.4 A summary of actions taken to insure that such breakdowns will not occur in the future.
- 1-433 Determination of Breakdown:** Following the report made pursuant to Section 1-431, the APCO shall promptly investigate to determine whether the occurrence reported constitutes a breakdown. The determination may be made based upon information developed by the investigation, or upon the basis of such information in addition to information reported in the written report made pursuant to Section 1-432. If the APCO determines that the occurrence does not constitute a breakdown, appropriate enforcement action may be taken.
- 1-434 Administrative Violation, Breakdown:** Any person who knowingly files falsely, or without probable cause, a claim for relief pursuant to Section 1-112 shall be presumed to be in violation of these regulations. The burden of proof of establishing that a breakdown has occurred shall be upon the person who requests the breakdown relief.
- 1-440 Right of Access to Premises:** The person responsible for emissions shall provide to the APCO reasonable access to any facility or equipment therein which is subject to the permit requirements of the District and which may cause or control or record such emissions for the purpose of investigating compliance with District regulations or California law. Such access shall be granted with due consideration for the safety of District employees and minimum interference with the operations of the facility.
- 1-441 Right of Access to Information:** The APCO may request in writing from a person responsible for emissions from any source: plans, specifications, records, samples or

other information which will disclose the nature, extent, quantity or degree of air contaminants which are or may be emitted by the source. Such information may include, but is not limited to, process charts, in-stack monitoring data and operating logs which relate to emissions. If the person feels that trade secrets are unreasonably being requested by the APCO, the person may appeal directly to the Board of Directors.

441.1 When copies of monitoring charts are requested, the APCO may require that such charts immediately be properly identified and labeled in the presence of a District representative.

441.2 When samples relating to emissions are requested, the APCO may require that such samples be obtained in the presence of a District representative.

441.3 Information requested by the APCO shall be provided as soon as reasonable possible, but in any event within 30 days from the date of receipt of the request.

1-500 MONITORING AND RECORDS

1-501 Sampling Facilities: A person responsible for the emission of air contaminants for which emission limits have been established by these regulations shall, upon the request of the APCO, provide such sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for the determination of the nature and quantity of such air contaminants.

1-502 Sampling at Type B Emission Points: Emissions from a Type B emission point shall be measured at the place and by procedures which show the highest measurement of air contaminants.

1-510 Area Monitoring: Persons subject to or seeking to come within the provisions of the area monitoring requirements of these regulations shall install, calibrate, operate, site and maintain all monitoring equipment in order to monitor continuously the concentration of the specified air pollutant. Such persons shall install suitable instruments, and meteorological stations to monitor continuously and record weather conditions if required by the APCO or the terms of the regulations.

1-520 Continuous Emission Monitoring: Persons responsible for the emissions from the following sources shall install monitors for the following air pollutants or analog thereof:

520.1 NO_x, CO₂, or O₂, from steam generators with a rated heat input of 264 GJ's (250 million BTU) or more per hour; and opacity from steam generators with a rated heat input of 264 GJ's (250 million BTU) or more per hour which are permitted for discretionary combustion of a non-gaseous fuel. Firing of non-gaseous fuel permitted under the "test-firing" provisions of District rules is not considered to be "discretionary."

520.2 NO_x from all new nitric acid plants, and existing plants having a production capacity in excess of 272 metric tons (300 T) per days as 100% nitric acid.

520.3 SO₂ from sulfuric acid plants.

520.4 SO₂ from sulfur recovery plants emitting more than 45 KG (100 lbs.) per day of SO₂.

520.5 SO₂ and opacity from the catalyst regenerators of fluid catalytic crackers.

520.6 SO₂ and opacity from fluid cokers with a fresh feed rate greater than 1600 m³ (10,000 bbls) per day.

520.7 SO₂ from fossil fuel fired steam generators with a heat input of 264 GJ's (250 million BTU) or more per hour with a use factor of at least 30% and utilizing flue gas desulfurizing units, and

520.8 Monitors as required by Regulations 10, 12 and Section 2-1-403 of Regulation 2. (Amended 3/17/82; 10/7/98)

1-521 Monitoring May Be Required: The APCO may require the installation of suitable instruments to monitor continuously the nature, quantity and opacity of any air pollutant controlled by District regulations where there is a reason to believe such emissions are in potential violation of such regulations.

Continuous Emission Monitoring and Recordkeeping Procedures: Persons responsible for installing continuous emission monitors pursuant to District regulations shall comply with the following:

- 522.1 Plans and specifications for monitoring selection and placement shall be submitted to the APCO for prior approval.
- 522.2 Installation scheduling shall be completed as specified in Volume V, Manual of Procedures (MOP).
- 522.3 Continuous emission monitors and their components shall be performance tested as specified in Volume V, MOP.
- 522.4 Continuous emission monitor periods of inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Adequate proof of expeditious repair shall be furnished to the APCO for downtime in excess of fifteen consecutive days.
- 522.5 Monitors shall be calibrated daily except for velocity sensing instruments which shall be calibrated monthly.
- 522.6 Continuous emission monitors and their components shall be maintained to be accurate to within twenty percent when compared to the field accuracy test procedures of Volume V, MOP, or 10% of the applicable emission standard, or 5% of span in the absence of an emission standard.
- 522.7 Any indicated excess of any emission standard to which the source is required to conform, as indicated by the monitor, shall be reported to the APCO within 96 hours after such occurrence. The report shall include the nature, extent, and cause.
- 522.8 Monitoring data shall be submitted on a monthly basis in a format specified by the APCO. Reports shall be submitted within 30 days of the close of the month reported on.
- 522.9 Records shall be maintained for a period of at least two years and shall be made available to the APCO on request. They shall include:
 - 1) Occurrence and duration of any startup, shutdown or malfunction.
 - 2) Tests, calibrations, adjustments and maintenance.
 - 3) Emission measurements.
- 522.10 Monitors required by Sections 1-521 or 2-1-403 shall meet the requirements specified by the APCO. (Adopted 3/17/82; Amended 9/2/98; 11/15/00)

Parametric Monitoring and Recordkeeping Procedures: Persons responsible for installing parametric monitors pursuant to District permit conditions or regulations shall comply with the following:

- 523.1 Parametric monitor periods of inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring to the Compliance and Enforcement Division.
- 523.2 Parametric monitor periods of inoperation shall not exceed 15 consecutive days per incident or 30 calendar days per consecutive 12-month period.
- 523.3 Any violation of permit conditions or District regulations to which the source is required to conform, as indicated by the monitor, shall be reported to the APCO within 96 hours after such occurrence. The report shall include the nature, extent, and cause.
- 523.4 Records shall be maintained for a period of at least two years and shall be made available to the APCO on request. They shall include:
 - 1) Dates and duration of monitoring system periods of inoperation.
 - 2) Tests, calibrations, adjustments and maintenance.
- 523.5 The person responsible for emissions being monitored shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications and the District Manual of Procedures. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The

written policy must explain and justify the difference between the written procedure and the manufacturer's procedure.

(Adopted 9/2/98; Amended 5/17/00; 11/15/00)

1-530 Area Monitoring Downtime: Area monitoring downtime caused by instrument malfunction, where such downtime exceeds a continuous 24-hour period, shall be reported to the APCO within the next normal working day after discovery of the malfunction. Downtime due to maintenance or repair which is expected to exceed 5 days' duration shall be reported to the APCO prior to the commencement of such maintenance or repairs. (Amended March 17, 1982)

1-540 Area Monitoring Data Examination: At intervals of no greater than seven days, data recorded by the instruments required pursuant to Section 1-510 shall be examined by the persons responsible for the instruments to determine compliance with District Regulations. (Amended March 17, 1982)

1-542 Area Concentration Excesses: Excesses of air pollutant levels over limits prescribed in District regulations recorded on instruments required pursuant to Section 1-510 shall be reported to the APCO within the next normal working day following the examination of data made pursuant to Section 1-540.

1-543 Record Maintenance for Two Years: Monitoring records of the equipment required by Section 1-510 shall be kept for a period of two years and shall be made available to the APCO upon request. (Amended March 17, 1982)

1-544 Monthly Summary: The person responsible for emissions being monitored pursuant to Section 1-510 shall provide in such form as prescribed by the APCO a summary of data obtained during each calendar month, as specified in the Manual of Procedures. (Amended March 17, 1982)

1-545 Deleted November 15, 2000

1-600 MANUAL OF PROCEDURES

1-600 Manual of Procedures: As part of these regulations there shall be established and periodically updated a Manual of Procedures. The Manual of Procedures shall include laboratory techniques, source test procedures, instrument specifications, monitoring requirements, enforcement procedures and other relevant information to determine the basis for enforcement action by the District. References to the Manual of Procedures is to the version adopted by the Board of Directors of the Bay Area Air Quality Management District. (Amended 12/18/85, 1/8/86, 12/2/87, 11/3/93, 9/2/98)

1-601 Approval of Sampling Facilities: The criteria by which the APCO shall determine the acceptability of sampling facilities are set forth in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District. (Amended 1/8/86; 12/2/87; 9/2/98)

1-602 Area and Continuous Emission Monitoring Requirements: The procedures for selection and placement, installation scheduling, performance testing, reporting, records retention and instrument calibration are detailed in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District. (Amended 1/8/86; 12/2/87; 9/2/98)

1-603 Visible Emissions: Procedures for reading of visible emissions by an observer are contained in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District. (Amended 1/8/86; 12/2/87; 9/2/98)

1-604 Opacity Measurements: Specifications and calibration procedures for instruments to be used to measure P and P₀ are to be found in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District. (Amended 1/8/86; 12/2/87; 9/2/98)

1-605 Laboratory, Source Test and Air Monitoring Procedures: The procedures for laboratory, source test and air monitoring analysis are detailed in the Manual of Procedures as adopted by the Board of Directors of the Bay Area Air Quality Management District. (Amended 1/8/86; 12/2/87; 1/18/89; 4/19/89; 9/2/98)

**REGULATION 1
GENERAL PROVISIONS AND DEFINITIONS
RULE 2
NOTICE TO COMPLY**

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**REGULATION 2
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RULE 1
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**REGULATION 2
PERMITS
RULE 1
GENERAL REQUIREMENTS**

(Adopted January 1, 1980)

2-1-100 GENERAL

2-1-101 Description: The purpose of Regulation 2 is to provide an orderly procedure for the review of new sources of air pollution, and of the modification and operation of existing sources, and of associated air pollution control devices, through the issuance of authorities to construct and permits to operate. The applicability of Regulation 2, Rule 1 is illustrated by Figure 2-1-101, Permit/Exemption Flow Chart. An applicant may choose to obtain a permit to operate for a source which is exempt from permit requirements. In that case, the affected source is deemed to be subject to the requirements of Section 2-1-302 until such time as an application for return to exempt status is approved. (Amended 7/17/91; 6/7/95; 5/17/00)

2-1-102 Applicable Requirements: The requirements of this Rule shall apply to Rules 2, 3, and 6 of this Regulation, unless superseded by specific requirements in Rules 2, 3, and 6. (Amended November 3, 1993)

2-1-103 Exemption, Source not Subject to any District Rule: Any source that is not already exempt from the requirements of Section 2-1-301 and 302 as set forth in Sections 2-1-105 to 2-1-128, is exempt from Section 2-1-301 and 302 if the source meets all of the following criteria:

103.1 The source is not subject to any of the provisions of Regulation 6⁽¹⁾, Regulation 8⁽²⁾ excluding Rules 1 through 4, Regulations 9 through 12; and

103.2 The source is not subject to any of the provisions of Sections 2-1-316 through 319; and

103.3 Actual emissions of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), PM₁₀ and carbon monoxide (CO) from the source are each less than 10 pounds per highest day. A source also satisfies this criterion if actual emissions of each pollutant are greater than 10 lb/highest day, but total emissions are less than 150 pounds per year, per pollutant.

Note 1: Typically, any source may be subject to Regulation 6, Particulate Matter and Visible Emissions. For the purposes of this section, Regulation 6 applicability shall be limited to the following types of sources that emit PM₁₀: combustion source; material handling/processing; sand, gravel or rock processing; cement, concrete and asphaltic concrete production; tub grinder; or similar PM₁₀-emitting source, as deemed by the APCO.

Note 2: If an exemption in a Regulation 8 Rule indicates that the source is subject to Regulation 8, Rules 1 through 4, then the source must comply with all applicable provisions of Regulation 8, Rules 1 through 4, to qualify for this exemption.

103.4 The source is not an ozone generator (a piece of equipment designed to generate ozone) emitting 1 lb/day or more of ozone.

(Adopted 6/7/95; Amended 5/17/00)

2-1-104 Deleted October 7, 1998

2-1-105 Exemption, Registered Statewide Portable Equipment: The following portable equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the equipment complies with all applicable requirements of the Statewide Portable Equipment Registration Program (California Code of Regulations Title 13, Division 3, Chapter 3, Article 5).

105.1 Confined abrasive blasting

105.2 Portland concrete batch plants

- 105.3 Spark ignition or diesel fired internal combustion engines used in conjunction with the following types of operations:
 - 3.1 Well drilling service or workover rigs;
 - 3.2 Power generation, excluding cogeneration;
 - 3.3 Pumps;
 - 3.4 Compressors;
 - 3.5 Pile drivers;
 - 3.6 Welding;
 - 3.7 Cranes; and
 - 3.8 Wood chippers

105.4 Sand and Gravel screening, rock crushing, pavement crushing and recycling operations;

105.5 Unconfined abrasive blasting. (Adopted 6/7/95; Amended 10/7/98; 5/17/00)

2-1-106

Limited Exemption, Accelerated Permitting Program: Unless subject to any of the provisions of Sections 2-1-316 through 319, any new or modified source is exempt from the Authority to Construct requirements of Section 2-1-301, provided that the owner or operator submits a complete application under the Accelerated Permitting Program. A complete permit application under this program consists of: a completed permit application form and source data form(s); payment of applicable fees (the minimum permit fee required to install and operate each source); and certification that the source meets all of the criteria set forth in Sections 2-1-106.1 through 106.3. Such a source is still subject to the Permit to Operate requirements of Section 2-1-302, but will be evaluated under the Accelerated Permitting Program, as described in Section 2-1-302.2.

106.1 Uncontrolled emissions of POC, NPOC, NO_x, SO₂, PM₁₀, and CO are each less than 10 pounds per highest day; or the source is pre-certified per Section 2-1-415; and

106.2 Emissions of toxic compounds do not exceed the trigger levels identified in Table 2-1-316; and

106.3 The source is not subject to the public notice requirements of Section 2-1-412.

In addition to the above, the replacement of any abatement device is exempt from the Authority to Construct requirements of Section 2-1-301 and will be evaluated under the Accelerated Permitting Program in Section 2-1-302.2, provided that the owner or operator certifies for all pollutants that the abatement device is as efficient as, or more efficient than, the abatement device being replaced. In addition to the above, any alteration of a source is exempt from the Authority to Construct requirements of Section 2-1-301 and will be evaluated under the Accelerated Permitting Program in Section 2-1-302.2, provided that the owner or operator certifies for all pollutants that the alteration does not result in an increase in emissions.

(Adopted 6/7/95; Amended 10/7/98; 5/17/00)

2-1-109 Deleted June 7, 1995

2-1-110 Deleted June 7, 1995

2-1-111 Deleted June 7, 1995

2-1-112 Deleted June 7, 1995

2-1-113 Exemption, Sources and Operations:

113.1 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302, in accordance with the California Health and Safety Code:

1.1 Single and multiple family dwellings used solely for residential purposes.

1.2 Any equipment used in agricultural operations, in the growing of crops or the raising of fowl or animals which is exempt from permits pursuant to the Health & Safety Code.

1.3 Any vehicle. Equipment temporarily or permanently attached to a vehicle is not considered to be a part of that vehicle unless the combination is a vehicle as defined in the Vehicle Code. Specialty

vehicles may include temporarily or permanently attached equipment including, but are not limited to, the following: oil well production service unit; special construction equipment; and special mobile equipment.

- 1.4 Tank vehicles with vapor recovery systems subject to state certification, in accordance with the Health and Safety Code.
- 113.2 The following sources and operations are exempt from the requirements of Sections 2-1-301 and 302:
- 2.1 Road construction, widening and rerouting.
 - 2.2 Restaurants, cafeterias and other retail establishments for the purpose of preparing food for human consumption.
 - 2.3 Structural changes which do not change the quality, nature or quantity of air contaminant emissions.
 - 2.4 Any abatement device which is used solely to abate equipment that does not require an Authority to Construct or Permit to Operate.
 - 2.5 Architectural and industrial maintenance coating operations that are exclusively subject to Regulation 8, Rules 3 or 48, because coatings are applied to stationary structures, their appurtenances, to mobile homes, to pavements, or to curbs. This does not apply to coatings applied by the manufacturer prior to installation, nor to the coating of components removed from such structures and equipment.
 - 2.6 Portable abatement equipment exclusively used to comply with the tank degassing control requirements of Regulation 8, Rule 5 and/or Regulation 8, Rule 40.
 - 2.7 Equipment that transports, holds or stores California Public Utilities Commission regulated natural gas, excluding drivers.
 - 2.8 Deleted May 17, 2000
 - 2.9 Deleted May 17, 2000
 - 2.10 Deleted May 17, 2000
 - 2.11 Teaching laboratories used exclusively for classroom experimentation and/or demonstration.
 - 2.12 Laboratories located in a building where the total laboratory floor space within the building is less than 25,000 square feet, or the total number of fume hoods within the building is less than 50, provided that Responsible Laboratory Management Practices, as defined in Section 2-1-224, are used. Buildings connected by passageways and/or corridors shall be considered as separate buildings, provided that structural integrity could be maintained in the absence of the passageways and/or corridors and the buildings have their own separate and independently operating HVAC and fire suppression systems. For the purposes of this subsection, teaching laboratories that are exempt per Section 2-1-113.2.11 are not included in the floor space or fume hood totals. In addition, laboratory units for which the owner or operator of the source can demonstrate that toxic air contaminant emissions would not occur, except under accidental or upset conditions, are not included in the floor space or fume hood totals.
 - 2.13 Maintenance operations on natural gas pipelines and associated equipment, provided that emissions from such operations consist solely of residual natural gas that is vented after the equipment is isolated or shut down.
 - 2.14 Space heating units that are not subject to Regulation 9, Rule 7, where emissions result solely from the combustion of natural gas or liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures) of less than 20 million BTU per hour heat input. Incinerators operated in conjunction with such sources are not exempt.
 - 2.15 Asbestos and asbestos containing material renovation or removal conducted in compliance with Regulation 11, Rule 2 and Regulation 3.

- 2.16 Closed landfills that have less than 1,000,000 tons of decomposable solid waste in place and that do not have an operating landfill gas collection system.
- 2.17 Closed landfills that have not accepted waste for at least 30 years and that never had a landfill gas collection system.
- 2.18 Construction of a building or structure that is not itself a source requiring a permit.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 11/15/00; 5/2/01)

2-1-114 Exemption, Combustion Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, only if the source does not emit pollutants other than combustion products, and those combustion products are not caused by the combustion of a pollutant generated from another source, and the source does not require permitting pursuant to Section 2-1-319.

114.1 Boilers, Heaters, Steam Generators, Duct Burners, and Similar Combustion Equipment:

- 1.1 Any of the above equipment with less than 1 million BTU per hour rated heat input.
- 1.2 Any of the above equipment with less than 10 million BTU per hour rated heat input if fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.

114.2 Internal Combustion Engines and Gas Turbines:

- 2.1 Internal combustion (IC) engines and gas turbines with a maximum output rating less than or equal to 50 hp.
- 2.2 Internal combustion (IC) engines and gas turbines used solely for instructional purposes at research, teaching, or educational facilities.
- 2.3 Portable internal combustion engines which are at a location for less than 72 consecutive hours.
- 2.4 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge. Facilities which include cargo loading or unloading from cargo carriers other than motor vehicles shall include the cargo carriers as part of the source which receives or loads the cargo.
- 2.5 Any engine mounted on, within, or incorporated into any vehicle, train, ship, boat, or barge used to provide propulsion for the vehicle, train, ship, boat, or barge and which is also used to supply mechanical or electrical power to ancillary equipment (e.g., crane, drill, winch, etc.) which is affixed to or is a part of the vehicle, train, ship, boat, or barge. Facilities which include cargo loading or unloading from cargo carriers other than motor vehicles shall include the cargo carriers as part of the source which receives or loads the cargo.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00; 8/1/01)

2-1-115 Exemption, Particulate Sources at Quarries, Mineral Processing and Biomass Facilities: The following potential PM₁₀ sources are exempt from the requirements of sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

115.1 Sources located at quarrying; mineral or ore handling or processing; concrete production; asphaltic concrete production; marine bulk transfer stations; concrete or asphaltic concrete recycling; vehicle shredding; glass manufacturing; handling or processing of cement, coke, lime, flyash, fertilizer, or catalyst; or other similar facility which meets one of the following:

- 1.1 Mixer and other ancillary sources at concrete or aggregate product production facilities with a maximum rated production capacity less than 15 cubic yards (yd³) per hour;
- 1.2 Other source at a facility with a maximum throughput less than 5000 tons per year;

- 1.3 Operating, loading and unloading a crusher or grinder which processes exclusively material with a moisture content greater than or equal to 20 percent by weight;
- 1.4 Operating, loading and unloading the following sources which process exclusively material with a moisture content greater than or equal to 5 percent by weight:
 - 1.4.1 Screen or other size classification;
 - 1.4.2 Conveyor, screw, auger, stacker or bucket elevator;
 - 1.4.3 Grizzly, or other material loading or unloading;
 - 1.4.4 Storage silos;
 - 1.4.5 Storage or weigh hopper/bin system.
- 1.5 Haul or access roads;
- 1.6 Drilling or blasting.
- 115.2 Sources located at biomass recycling, composting, landfill, POTW, or related facilities specializing in the operation of, but not limited to, the following:
 - 2.1 Tub grinder powered by a motor with a maximum output rating less than 10 horsepower;
 - 2.2 Hogger, shredder or similar source powered by a motor with a maximum output rating less than 25 horsepower;
 - 2.3 Other biomass processing/handling sources at a facilities with a total throughput less than 500 tons per year. (Amended 6/7/95; 5/17/00)

2-1-116 Exemption, Furnaces, Ovens and Kilns: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 116.1 Porcelain enameling furnaces, porcelain enameling drying ovens, vitreous enameling furnaces or vitreous enameling drying ovens.
- 116.2 Crucible furnaces, pot furnaces, induction furnaces, cupolas, electric arc furnaces, reverberatories, or blast furnaces with a capacity of 1000 lbs or less each.
- 116.3 Crucible furnaces, pot furnaces, or induction furnaces for sweating or distilling that process 100 tons per year of all metals or less.
- 116.4 Drying or heat-treating ovens with less than 10 million BTU per hour capacity provided that a) the oven does not emit pollutants other than combustion products and b) the oven is fired exclusively with natural gas (including compressed natural gas), liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures), or any combination thereof.
- 116.5 Ovens used exclusively for the curing of plastics which are concurrently being vacuum held to a mold, or for the softening and annealing of plastics.
- 116.6 Ovens used exclusively for the curing of vinyl plastisols by the closed mold curing process.
- 116.7 Ovens used exclusively for curing potting materials or castings made with epoxy resins.
- 116.8 Kilns used for firing ceramic ware, heated exclusively by natural gas, liquefied petroleum gas, electricity or any combination thereof.
- 116.9 Parts cleaning, bake-off, and similar ovens that meet both of the following:
 - 9.1 Oven is equipped with a secondary combustion chamber or abated by a fume incinerator; and
 - 9.2 Internal oven volume is 1 cubic yard or less.
- 116.10 Electric ovens used exclusively for curing or heat-treating where no significant off-gassing or evaporation of any air contaminants occurs.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-117 Exemption, Food and Agricultural Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 117.1 Smokehouses or barbecue units in which the maximum horizontal inside cross sectional area does not exceed 20 square feet.

- 117.2 Equipment at facilities other than restaurants, cafeterias or other retail operations, which is used to dry, cook, fry, bake, or grill less than 1000 tons per year of food products.
- 117.3 Any oven with a total production of yeast leavened bakery products of less than 10,000 pounds per operating day, averaged over any period of seven consecutive days, and which is heated either electrically or exclusively by natural gas firing with a maximum capacity of less than 10 million BTU per hour.
- 117.4 Equipment used exclusively to grind, blend, package, or store tea, cocoa, spices, or coffee.
- 117.5 Equipment used to dry, mill, grind, blend, or package less than 1000 tons per year of dry food products such as seeds, grains, corn, meal, flour, sugar, and starch.
- 117.6 Equipment used to convey, transfer, clean, or separate less than 1000 tons per year of dry food products or waste from food production operations.
- 117.7 Storage equipment or facilities containing dry food products; which are not vented to the outside atmosphere, or which handle less than 1000 tons per year.
- 117.8 Coffee, cocoa and nut roasters with a roasting capacity of less than 15 pounds of beans or nuts per hour; and any stoners or coolers operated in conjunction with these roasters.
- 117.9 Containers, reservoirs, tanks, or loading equipment used exclusively for the storage or loading of beer, wine or other alcoholic beverages.
- 117.10 Fermentation tanks for beer or wine. Fermentation tanks used for the commercial production of yeast for sale are not exempt.
- 117.11 Brewing operations at facilities producing less than 3 million gallons per year of beer.
- 117.12 Fruit sulfuring operations at facilities producing less than 10 tons per year of sulfured fruits and vegetables.

(Adopted 10/19/83; Amended 4/16/86; 7/1791; 6/7/95; 5/17/00)

2-1-118 Exemption, Surface Preparation and Cleaning Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 118.1 Permanent abrasive blasting source, as defined by Regulation 12, Rule 4, that has a confined volume less than 100 cubic feet (ft³) and is abated by a particulate filter.
- 118.2 Blast cleaning equipment using a suspension of abrasive in water.
- 118.3 Portable abrasive blasting equipment used on a temporary basis within the District.
- 118.4 Equipment, including solvent cold cleaners using an unheated solvent mixture for surface preparation, cleaning, wipe cleaning, fluxing or stripping by use of solutions with a VOC content less than or equal to 50 grams per liter (0.42 lb/gal).
- 118.5 Equipment using a heated solvent mixture for steam cleaning, surface preparation, fluxing, stripping, wipe cleaning, washing or drying products, provided that a) only solutions containing less than 2.5 percent VOC (wt) are used; and b) any combustion sources used in the process are exempt under Section 2-1-114.
- 118.6 Equipment or operations which use unheated solvent and which contain less than 1 gallon of solvent or have a liquid surface area of less than 1 ft². This exemption does not apply to solvent stations at semiconductor manufacturing operation fabrication areas or aerospace stripping operations.
- 118.7 At any facility, not more than one solvent cold cleaner that is used for surface preparation, cleaning, or stripping with solvents or solutions that do not meet the VOC limit of 50 grams per liter (0.42 lb/gal) and from which solvent loss does not exceed 20 gallons per year. This exemption does not apply to

solvent wipe cleaning operations or solvent cleaning stations at semiconductor manufacturing fabrication areas.

- 118.8 Batch solvent recycling equipment where all of the following apply:
- 8.1 Recovered solvent is used primarily on site (more than 50% by volume); and
 - 8.2 Maximum heat input (HHV) is less than 1 million BTU per hour; and
 - 8.3 Batch capacity is less than 150 gallons.
- 118.9 Wipe cleaning at a facility with a net solvent usage less than 20 gallons per year, or which emits to the atmosphere less than 150 lb/year of VOC from all wipe cleaning operations. At a facility with total wipe cleaning emissions greater than 150 lb/yr, wipe cleaning operations may be grouped per Section 2-1-401.4.
- 118.10 Any solvent cleaning or surface preparation source which employs only non-refillable hand held aerosol cans.
- 118.11 Spray gun cleaning performed in compliance with Regulation 8.

(Adopted 10/19/83; Amended 4/16/86; 8/2/89; 7/17/91; 6/7/95; 5/17/00)

2-1-119 Exemption, Surface Coating and Printing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 119.1 Any powder coating operation, or radiation cured coating operation where ultraviolet or electron beam energy is used to initiate a reaction to form a polymer network.
- 119.2 Any coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or operation at any facility which:
- 2.1 Consumes a total of less than 30 gallons of coating per year on a facility wide basis, or emits less than 150 pounds per year of uncontrolled VOC on a facility wide basis, resulting from the application of coatings; or
 - 2.2 Uses exclusively materials that contain less than one percent VOC (wt).
- At a facility with coating emissions greater than 150 lb/yr, coating operations may be grouped per Section 2-1-401.3.
- 119.3 Any coating source which employs only non-refillable hand held aerosol cans.
- 119.4 An oven associated with an exempt coating source, provided that the oven is electrically heated, or the oven is fired exclusively with natural gas, liquefied petroleum gas (e.g. propane, butane, isobutane, propylene, butylenes, and their mixtures) and the maximum firing rate is less than 10 million BTU per hour.

(Adopted 10/19/83; Amended 4/16/86; 7/17/91; 6/7/95; 5/17/00)

2-1-120 Exemption, Dry Cleaning Equipment: Any dry cleaning facility which uses less than 700 gallons of petroleum solvents or any other non-halogenated solvent in any single year is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319. Equipment which used perchloroethylene or any other halogenated solvent is not exempt.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-121 Exemption, Material Working and Handling Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 121.1 Equipment used for buffing, carving, cutting, drilling, grinding, machining, planing, routing, sanding, sawing, shredding, stamping or turning of wood, ceramic artwork, ceramic precision parts, leather, metals, plastics, rubber, fiberboard, masonry, glass, silicon, semiconductor wafers, carbon or graphite, provided that organic emissions from the use of coolant, lubricant, or cutting oil are 5 ton/yr or less.
- 121.2 Equipment used for pressing or storing sawdust, wood chips or wood shavings.

- 121.3 Equipment used exclusively to mill or grind coatings and molding compounds in a paste form provided the solution contains less than one percent VOC (wt).
- 121.4 Tumblers used for the cleaning or deburring of metal products without abrasive blasting.
- 121.5 Batch mixers with a rated working capacity of 55 gallons or less.
- 121.6 Mixing equipment provided no material in powder form is added and mixture contains less than one percent VOC (wt).
- 121.7 Equipment used exclusively for the mixing and blending of materials at ambient temperature to make water based adhesives.
- 121.8 Equipment used exclusively for the mixing and packaging of lubricants or greases.
- 121.9 Presses used exclusively for extruding metals, minerals, plastics or wood.
- 121.10 Presses used for the curing of rubber products and plastic products. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.
- 121.11 Platen presses used for laminating.
- 121.12 Roll mills or calendars for rubber or plastics.
- 121.13 Equipment used exclusively for forging, pressing, rolling, stamping or drawing metals or for heating metals immediately prior to forging, pressing, rolling, stamping or drawing, provided that: (1) maximum fuel use rate is less than 10 million BTU/hr; (2) no lubricant with an initial boiling point less than 400°F is used; and (3) organic emissions are 5 ton/yr or less.
- 121.14 Atmosphere generators used in connection with metal heat treating processes.
- 121.15 Equipment used exclusively for the sintering of glass or metals.
- 121.16 Equipment used exclusively for the melting or applying of wax containing less than one percent VOC (wt).
- 121.17 Equipment used exclusively for conveying and storing plastic pellets.
- 121.18 Solid waste transfer stations that receive or load out a total of all material less than 50 tons/day.
- 121.19 Inactive solid waste disposal sites which do not have an operating landfill gas collection system. (Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-122 Exemption, Casting and Molding Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 122.1 Molds used for the casting of metals.
- 122.2 Foundry sand mold forming equipment to which no heat is applied, except processes utilizing organic binders yielding in excess of 0.25% free phenol by weight of sand.
- 122.3 Shell core and shell-mold manufacturing machines.
- 122.4 Equipment used for extrusion, compression molding and injection molding of plastics. The use of mold release products or lubricants is not exempt unless the VOC content of these materials is less than or equal to 1 percent, by weight, or unless the total facility-wide uncontrolled VOC emissions from the use of these materials are less than 150 lb/yr.
- 122.5 Die casting machines.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-123 Exemption, Liquid Storage and Loading Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 123.1 Storage tanks and storage vessels having a capacity of less than 260 gallons.
- 123.2 Tanks, vessels and pumping equipment used exclusively for the storage or dispensing of any aqueous solution which contains less than 1 percent (wt)

organic compounds. Tanks and vessels storing the following materials are not exempt.

- 2.1 Sulfuric acid with an acid strength of more than 99.0% by weight.
- 2.2 Phosphoric acid with an acid strength of more than 99.0% by weight.
- 2.3 Nitric acid with an acid strength of more than 70.0% by weight.
- 2.4 Hydrochloric acid with an acid strength of more than 30.0% by weight.
- 2.5 Hydrofluoric acid with an acid strength of more than 30.0% by weight.
- 2.6 More than one liquid phase, where the top phase contains more than one percent VOC (wt).

123.3 Containers, reservoirs, tanks or loading equipment used exclusively for:

- 3.1 Storage or loading of liquefied gases.
- 3.2 Storage or loading of organic liquids or mixtures containing organic liquids; where the initial boiling point of the organics is greater than 302°F and exceeds the actual storage temperature by at least 180°F. This exemption does not apply to the storage or loading of asphalt or asphalt emulsion with a sulfur content equal to or greater than 0.5 wt%.
- 3.3 The storage or loading of petroleum oils with an ASTM D-93 (PMCC) flash point of 130°F or higher, when stored or loaded at a temperature at least 36°F below the flash point.
- 3.4 The storage or loading of lubricating oils.
- 3.5 The storage of fuel oils with a gravity of 40 API or lower and having a capacity of 10,000 gallons or less.
- 3.6 The storage or loading of liquid soaps, liquid detergents, tallow, or vegetable oils, waxes or wax emulsions.
- 3.7 The storage of asphalt or asphalt emulsion with a sulfur content of less than 0.5 wt%. This does not include the storage of asphalt cutback with hydrocarbons having an initial boiling point of less than 302°F.
- 3.8 The storage of wine, beer or other alcoholic beverages.
- 3.9 The storage of organic salts or solids in an aqueous solution or suspension, provided that no liquid hydrocarbon layer forms on top of the aqueous phase.
- 3.10 The storage or loading of fuel oils with a gravity of 25 API or lower.
- 3.11 The storage and/or transfer of an asphalt-water emulsion heated to 150°F or less.

123.4 Tank seal replacement. For any tank subject to Regulation 8, Rule 5, any new seal must comply with the applicable provisions of Regulation 8, Rule 5, and the District must receive written notification of the tank source number and seal type at least three days prior to the installation.

(Adopted 10/19/83; Amended 7/11/84; 7/17/91; 6/7/95; 5/17/00)

2-1-124 Exemption, Semiconductor Manufacturing: Semiconductor fabrication area(s) at a facility which complies with all of the following are exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 124.1 Net solvent usage is less than 20 gallons of VOC per year on a facility wide basis; or uncontrolled VOC emissions to the atmosphere resulting from the usage of solvent are less than 150 pounds per year of VOC on a facility wide basis, and
- 124.2 Maskant and/or coating usage is less than 30 gallons per year, on a facility wide basis; or uncontrolled VOC emissions from the application of maskant and coatings are less than 150 pounds per year on a facility wide basis.

(Adopted 10/19/83; Amended 1/9/85; 4/16/86; 7/17/91; 6/7/95; 10/20/99; 5/17/00)

2-1-125 Exemption, Printed Circuit Board Manufacturing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 125.1 Equipment used exclusively for:
 - 1.1 Plating of printed circuit boards.

- 1.2 Buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning of printed circuit boards.
- 1.3 Soldering. This section does not exempt fluxing and finger cleaning (see Section 2-1-118.4).

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-126 Exemption, Testing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 126.1 Equipment used for hydraulic or hydrostatic testing.
- 126.2 Bench scale laboratory equipment or processes used exclusively for chemical or physical analyses or experimentation, quality assurance and quality control testing, research and development, or similar bench scale equipment, excluding pilot plants.
- 126.3 Equipment used for inspection of metal products.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-127 Exemption, Chemical Processing Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 127.1 Equipment used exclusively for the dyeing or stripping (bleaching) of textiles provided that only solutions containing less than one percent VOC (wt) are used.
- 127.2 Photographic process equipment by which an image is reproduced upon material sensitized to radiant energy.
- 127.3 Containers, reservoirs, or tanks used exclusively for electrolytic plating with, or electrolytic polishing of, or electrolytic stripping of the following metals: aluminum, brass, bronze, cadmium, copper, iron, nickel, tin, zinc and precious metals.
- 127.4 Containers, reservoirs, or tanks used exclusively for etching (not chemical milling), except where ammonia or ammonium-based etchants are used.

(Adopted 10/19/83; Amended 7/17/91; 6/7/95; 5/17/00)

2-1-128 Exemption, Miscellaneous Equipment: The following equipment is exempt from the requirements of Sections 2-1-301 and 302, provided that the source does not require permitting pursuant to Section 2-1-319.

- 128.1 Comfort air conditioning or comfort ventilating systems which are not designed to remove air contaminants generated by or released from specific units of equipment.
- 128.2 Refrigeration units except those used as, or in conjunction with, air pollution control equipment.
- 128.3 Vacuum producing devices in laboratory operations which are used exclusively in connection with other equipment which is exempted by this Rule, and vacuum producing devices which do not remove or convey air contaminants from another source.
- 128.4 Water cooling towers and water cooling ponds not used for evaporative cooling of process water, or not used for evaporative cooling of water from barometric jets or from barometric condensers.
- 128.5 Natural draft hoods, natural draft stacks or natural draft ventilators.
- 128.6 Vacuum cleaning system used exclusively for industrial commercial or residential housekeeping purposes.
- 128.7 Equipment used to liquefy or separate oxygen, nitrogen or the rare gases from the air.
- 128.8 Equipment used exclusively to compress or hold dry natural gas, excluding drivers.
- 128.9 Equipment used exclusively for bonding lining to brake shoes.
- 128.10 Equipment used exclusively for the manufacture of water emulsions of waxes, greases or oils.
- 128.11 Brazing, soldering or welding equipment.

- 128.12 Pharmaceutical manufacturing equipment with annual VOC emissions less than 150 pounds per source. Material working and handling equipment such as mills, grinders, blenders, granulators, tablet presses, capsule fillers, packagers, and conveyors are only exempt if the source also processes less than 100 tons per year of pharmaceutical products.
- 128.13 Equipment used exclusively to blend or package cosmetics.
- 128.14 Any wastewater (oil-water) separator, as defined in Regulation 8, Rule 8, which processes less than 200 gallons per day of waste water containing organic liquids.
- 128.15 Exploratory drilling activities for methane recovery at waste disposal sites, for natural gas or for oil. Production wells for the above operations are not exempt.
- 128.16 Passive aeration of soil, only if:
 - 16.1 The duration of the passive aeration operation will not exceed three months, and
 - 16.2 The soil is not being used as a cover material at a landfill.
- 128.17 Ozone generators which produce less than 1 pound per day of ozone.
- 128.18 Any source or operation which exclusively uses consumer products regulated by the California Air Resources Board (California Code of Regulations Title 17, Article 2, Sections 94507-94517).
- 128.19 Any source or operation deemed by the APCO to be equivalent to a source or operation which is expressly exempted by Sections 2-1-113 through 128.
- 128.20 Wastewater pumping stations where no treatment is performed, excluding any drivers.
- 128.21 Modification, replacement, or addition of fugitive components (e.g. valves, flanges, pumps, compressors, relief valves, process drains) at existing permitted process units at petroleum refineries, chemical plants, bulk terminals or bulk plants, provided that the cumulative emissions from all additional components installed at a given process unit during any consecutive twelve month period do not exceed 10 lb/day, and that the components meet applicable requirements of Regulation 8 rules.
- 128.22 Fuel cells which use phosphoric acid, molten carbonate, proton exchange membrane, solid oxide or equivalent technologies.
- 128.23 Structure demolition that does not involve asbestos or asbestos containing materials.

(Adopted 10/19/83; Amended 7/16/86; 7/17/91; 6/7/95; 5/17/00; 11/15/00)

2-1-129 Major Facility Review: Notwithstanding the exemptions listed in this section, every source exempted by this Rule shall be included in any application for a synthetic minor or major facility review permit required by Regulation 2, Rule 6.

(Adopted 12/3/93; Amended 2/1/95; 5/17/00)

2-1-200 DEFINITIONS

2-1-201 Emission Reduction Credits: An emission reduction, calculated in accordance with Regulation 2-2-605, which exceeds the emission reductions required by measures in the Air Quality Management Plan or the Clean Air Plan approved by the BAAQMD or required by federal, state, or District laws, rules, and regulations. To qualify as an emission reduction credit the emission reduction must be in excess of the reductions achieved by the source using Reasonably Available Control Technology (RACT), and must also be real, permanent, quantifiable, and enforceable.

201.1 Unless calculated in accordance with the procedures of Regulation 2-2-605, that portion of an NSR emission cap, which was part of an APCO approved alternative baseline, shall not qualify as an emission reduction credit.

201.2 All emission reduction credits shall be enforceable by permit conditions in the authority to construct and permit to operate, except that in the case of source closures where no permit is required for the source being shut down, the emission reduction credit shall be enforceable through appropriate

contractual provisions in a legally binding and irrevocable written agreement which provisions will be made expressly for the benefit of the District. The permanence of a closure shall be identified in a letter from the source and/or in a Banking Certificate. (Amended 7/17/91; 6/15/94)

- 2-1-202 Complete Application:** An application which contains the following:
- 202.1 Sufficient information for the APCO to determine the emissions from such new or modified source and to quantify emissions from the proposed source(s) of offsets or credits.
 - 202.2 Any information requested by the APCO in order to determine the air quality impact of the application.
 - 202.3 All applicable fees, as described in Regulation 3.
 - 202.4 The information required by Regulation 2-2-414 and 417 provided the application is subject to the PSD requirements of Regulations 2-2-304, 305, 306, or 308.
 - 202.5 CEQA-related information which satisfies the requirements of Section 2-1-426.
 - 202.6 A certification, stating whether the source triggers the requirements of Section 2-1-412.
 - 202.7 A specific designation of all information, contained in the application, which is asserted to be a trade secret pursuant to Section 6254.7 of the Government Code and not a public record. Such designated information shall be provided in such a manner whereby it may be easily separated from information which is not asserted to be a trade secret. The applicant shall include, for each separate portion of the application which is asserted to be a trade secret, a statement signed by a responsible representative of the applicant identifying that portion of Government Code Section 6254.7 (d) upon which the assertion is based and a brief statement setting forth the basis for this assertion.
(Amended 7/17/91; 11/20/91; 5/17/00)
- 2-1-203 Fugitive Emissions:** Fugitive emissions are all emissions from unintended openings in process equipment, emissions occurring from miscellaneous activities relating to the operation of a facility, and those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening.
(Adopted October 19, 1983)
- 2-1-204 Major Facility:** A major facility is any of the following:
- 204.1 Major Facility, MFR (Regulated Air Pollutants): A facility that has the potential to emit 100 tons per year or more of any regulated air pollutant except total suspended particulate. For fugitive emissions of regulated air pollutants, only the fugitive emissions from facility categories listed in 40 CFR 70.2 "Definitions - *Major source* (2)" shall be included in determining whether the facility is a major facility. Once any facility is determined to be a major facility, all fugitive emissions from the facility shall be included in calculating the facility's emissions.
 - 204.2 Major Facility, MFR (Hazardous Air Pollutants): A facility that has the potential to emit 10 tons per year or more of a single hazardous air pollutant, 25 tons per year or more of a combination of hazardous air pollutants, or such lesser quantity as the EPA Administrator may establish by rule. All fugitive emissions of hazardous air pollutants are included in determining a facility's potential to emit. For radionuclides, the definition of a major facility shall be specified by the EPA Administrator by rule.
 - 204.3 A facility with permit conditions that limit emissions to a level that is greater than the above thresholds is defined as a major facility.
(Amended 7/17/91; 11/3/93; 5/17/00)
- 2-1-205 National Ambient Air Quality Standards (NAAQS):** Levels of air pollution that have been established by the Environmental Protection Agency. All references to NAAQS shall be interpreted to include state ambient air quality standards.
(Amended 10/7/81; 4/6/88)

- 2-1-206 Organic Compound:** Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate and methane.
- 2-1-207 Organic Compound, Non-Precursor (NPOC):** The following are considered non-precursor organic compounds:
 methylene chloride; chloropentafluoroethane (CFC-115); 1,1,1-trichloroethane; 1,1,1-trifluoro 2,2-dichloroethane (HFC-123); 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124); trichlorofluoromethane (CFC-11); 1,1,2-trichloro 1,2,2-trifluoroethane (CFC-113); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1,2-tetrafluoroethane (HFC-134a); dichlorodifluoromethane (CFC-12); 1,1-dichloro 1-fluoroethane (HFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 1,1,1-trifluoroethane (HFC-143a); 1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114); 1,1-difluoroethane (CFC-152a); chlorodifluoromethane (HCFC-22); trifluoromethane (HFC-23), and perfluorocarbons which fall into these classes:
 (1) Cyclic, branched, or linear, completely fluorinated alkanes,
 (2) Cyclic, branched, or linear, completely fluorinated ethers with no unsaturations,
 (3) Cyclic, branched, or linear, completely fluorinated tertiary amines with no unsaturations, and
 (4) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- In addition, any compound designated as having a negligible contribution to photochemical reactivity by the U.S. Environmental Protection Agency as published in the Federal Register shall be considered a Non-Precursor Organic Compound.
 (Amended 7/17/91; 6/15/94)
- 2-1-208 Organic Compound, Precursor:** Any organic compound as defined in Regulation 1-233 excepting the non-precursor organic compounds, defined in Section 2-1-207.
 (Adopted 3/17/82; Amended 7/17/91)
- 2-1-209 Reasonably Available Control Technology (RACT):** For sources which are to continue operating, RACT is the lowest emission limit that can be achieved by the specific source by the application of control technology taking into account technological feasibility and cost-effectiveness, and the specific design features or extent of necessary modifications to the source. For sources which are or will be shut-down, RACT is the lowest emission limit that can be achieved by the application of control technology to similar, but not necessarily identical categories of sources, taking into account technological feasibility and cost-effectiveness of the application of the control technology to the category of sources only and not to the shut-down source.
 (Adopted 3/17/82, Amended 10/19/83)
- 2-1-210 Start-Up Period:** The period of time between initial operation and the issuance or denial of a permit to operate of a source or facility. (Adopted October 19, 1983)
- 2-1-211 CEQA:** The California Environmental Quality Act, Public Resources Code, Section 21000, et seq. (Adopted July 17, 1991)
- 2-1-212 EIR:** Environmental Impact Report, as defined in Public Resources Code Section 21000 et seq. (Adopted 7/17/91; Amended 5/17/00)
- 2-1-213 Facility:** Any property, building, structure or installation (or any aggregation of facilities) located on one or more contiguous or adjacent properties and under common ownership or control of the same person that emits or may emit any air pollutant and is considered a single major industrial grouping (identified by the first two-digits of the applicable code in *The Standard Industrial Classification Manual*). In addition, facilities which include cargo loading or unloading from cargo carriers other than motor vehicles shall include the cargo carriers as part of the source which receives or loads the cargo. Accordingly, all emissions from such carriers while operating in the District, or within California Coastal Waters adjacent to the District, shall be included as part of the source emissions. (Adopted November 3, 1993)
- 2-1-214 Federally Enforceable:** All limitations and conditions which are enforceable by the Administrator of the U. S. EPA, including requirements developed pursuant to 40 CFR

Parts 60 (NSPS), 61 (NESHAPS), 63 (HAP), 70 (State Operating Permit Programs) and 72 (Permits Regulation, Acid Rain), requirements contained in the State Implementation Plan (SIP) that are applicable to the District, any District permit requirements established pursuant to 40 CFR 52.21 (PSD) or District regulations approved pursuant to 40 CFR Part 51, Subpart I (NSR), and any operating permits issued under an EPA-approved program that is a part of the SIP and expressly requires adherence to any permit issued under such program.

(Adopted November 3, 1993)

2-1-215 Hazardous Air Pollutant (HAP): Any pollutant that is listed pursuant to Section 112(b) of the federal Clean Air Act. (Adopted 11/3/93; Amended 5/17/00)

2-1-216 Major Facility Review (MFR): Plantwide review of sources, emissions and regulatory requirements at facilities including, but not limited to, major facilities, phase II acid rain facilities, subject solid waste incinerator facilities, and designated facilities, which are potentially subject to the permitting requirements of Regulation 2, Rule 6, and Title V of the federal Clean Air Act. (Adopted November 3, 1993)

2-1-217 Potential to Emit: The maximum capacity of a source or facility to emit a pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the source or facility to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a part of its design only if the limitation, or the effect it would have on emissions, is enforceable by the District or EPA. A source or facility that exceeds an enforceable limitation is considered to have a potential to emit that is unconstrained by any such exceeded limit.

(Adopted 11/3/93; Amended 5/17/00)

2-1-218 Regulated Air Pollutant: The following air pollutants (as defined in Regulation 1) are regulated:

218.1 Nitrogen oxides and volatile organic compounds;

218.2 Any pollutant for which a national ambient air quality standard has been promulgated;

218.3 Any Class I or Class II ozone depleting substance subject to a standard promulgated under Title VI of the federal Clean Air Act;

218.4 Any pollutant that is subject to any standard promulgated under Section 111 of the federal Clean Air Act; and

218.5 Any pollutant that is subject to any standard promulgated under Section 112 of the federal Clean Air Act, except that a pollutant that is subject solely to Section 112(r) is not a regulated air pollutant.

(Adopted 11/3/93; Amended 5/17/00)

2-1-219 Synthetic Minor Operating Facility: A facility which by imposition of facilitywide federally enforceable permit conditions has its potential to emit limited to below the threshold levels for a major facility as defined by Sections 204.1 and 204.2 of this rule and in Section 212 of Regulation 2, Rule 6, and is not otherwise required to apply for a major facility review permit under Regulation 2, Rule 6.

(Adopted November 3, 1993)

2-1-220 Portable Equipment: This definition is provided exclusively for determining applicability of Section 2-1-413: Portable Equipment Operated Within the District. "Portable equipment" means any emission unit that, by itself or, in or on a piece of equipment, is portable, meaning designed to be and capable of being carried or moved from one location to another. Indications of portability include, but are not limited to, wheels, skids, carrying handles, dolly trailer, platform or mounting. A piece of equipment is portable, for purposes of obtaining a portable permit under Section 2-1-413, if all of the following are met:

220.1 The equipment will not remain at any single location for a period in excess of twelve consecutive months, following the date of initial operation. Any emission unit, such as back up or standby unit, which replaces an emission unit at that location and is intended to perform the same function as the unit being replaced, will be counted toward the time limitation.

- 220.2 The source (emission unit) remains or will remain at a location for no more than twelve months, following the date of initial operation, where such a period does not represent the full length of normal annual source operations, such as operations which are seasonal.
- 220.3 The equipment is not removed from, or stored at, one location for a period and then returned to the same location in an attempt to circumvent the portable equipment residence time requirement.
- 220.4 The equipment is not operated within 1000 feet of the outer boundary of any K-12 schoolsite, unless the applicable notice requirements of Health and Safety Code Section 42301.6 have been met.
- 220.5 The operation complies with the Toxic Risk Management Policy.
- 220.6 No air contaminant is released into the atmosphere in sufficient quantities as to cause a public nuisance per Regulation 1-301.
- 220.7 The operation of the portable equipment in the Air District shall emit no more than 10 tons per year of each pollutant, including POC, CO, NO_x, PM₁₀, NPOC or SO₂. For PM₁₀, fugitive particulate emissions from haul road traffic shall not be counted toward the annual limit.
- 220.8 The operation must be exempt from CEQA, or must be covered by a chapter in the District's Permit Handbook.
- 220.9 The equipment will not cause a Synthetic Minor Facility to exceed a federally enforceable emission limit.
- 220.10 If this equipment remains at any fixed location for more than twelve months, the portable permit will automatically revert to a conventional permanent location permit and will lose its portability. To obtain another portable permit for the equipment, the owner must re-permit the equipment for the next location of intended operations. Upon written request, the APCO may exclude reasonable storage periods before the date of initial operation and/or following the date of final operation from the twelve month time limitation.

(Adopted 6/7/95; Amended 10/7/98)

2-1-221 Source: Any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants. (Adopted June 7, 1995)

2-1-222 Toxic Air Contaminant (TAC): An air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. Toxic air contaminants consist of those substances identified by the Air Resources Board under Section 39662 of the State Health and Safety Code, and those substances listed as hazardous air pollutants under subsection (b) of Section 112 of the federal Clean Air Act. (Adopted 6/7/95; Amended 5/17/00)

2-1-223 Year: Unless otherwise specified by an operating rule of the District or by a permit condition, a year shall be defined by an applicant or permit holder as one of the following:

- 223.1 Any consecutive 12 month period;
- 223.2 Any consecutive 4 quarter period, where a quarter is 3 consecutive months;
- 223.3 Any consecutive 52 week period;
- 223.4 Any consecutive 365 day period;
- 223.5 Any company fiscal year, provided the fiscal year is 12 consecutive months;
- 223.6 Calendar year;
- 223.7 Any other mutually acceptable period.

In the absence of a rule requirement, permit condition or other information to determine which yearly period applies, the District shall use Section 2-1-223.1.

(Adopted June 7, 1995)

2-1-224 Responsible Laboratory Management Practices: For the purposes of meeting the laboratory exemption of Section 2-1-113.2.12, Responsible Laboratory Management Practices include all of the following measures for minimizing the emissions of toxic air contaminants:

- 224.1 Open container procedures involving materials that contain volatile toxic air contaminants (TACs) shall be avoided where feasible.

- 224.2 Open container storage of volatile hazardous chemical wastes shall be avoided.
- 224.3 Training for laboratory employees handling hazardous materials shall include information about minimizing the emissions of volatile TACs. These employees shall be directed to avoid open container procedures involving volatile TACs where feasible, and to avoid open container storage of hazardous chemical waste.
- 224.4 Fume hoods shall be posted with notices reminding employees to avoid open container procedures using volatile TACs where feasible. Laboratories shall be inspected periodically, but not less than annually, to confirm that these notices are present.
- 224.5 Laboratory fume hoods shall be monitored periodically to assure proper face velocity.
- 224.6 Evaporation of any hazardous chemical waste containing TACs as a means of disposal shall be expressly forbidden. (Adopted June 7, 1995)
- 2-1-225 Risk Screening Analysis:** An assessment of the measure of health risk for individuals in the affected population that may be exposed to emissions of toxic air contaminants from a given source. For the purposes of this Rule, a risk screening analysis may be a simplified analysis or, where available, a more refined health risk assessment utilizing appropriate site-specific information. (Adopted June 7, 1995)
- 2-1-226 Statewide Portable Equipment Registration Program:** A uniform system for statewide registration and regulation of portable internal combustion and associated equipment, implemented by the Air Resources Board pursuant to Section 41750 et seq. of the Health and Safety Code. (Adopted October 7, 1998)
- 2-1-227 Substantial Use:** Substantial use of an Authority to Construct consists of one or more of the following: purchase or acquisition of the equipment that constitutes the source; ongoing construction activities other than grading or installation of utilities or foundations; a contract or commitment to complete construction of the source within two years. (Adopted October 7, 1998)
- 2-1-228 Particulate Matter (PM):** Any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 microns. (Adopted October 7, 1998)
- 2-1-229 PM₁₀:** Particulate matter with aerodynamic diameter smaller than or equal to a nominal 10 microns. (Adopted October 7, 1998)
- 2-1-230 Functionally Equivalent:** Performing the same, or equivalent, function as the object of comparison. A functionally equivalent replacement source performs the same function for the process as the source being replaced, although emissions and other characteristics may differ. A replacement that performs additional functions is not considered to be functionally equivalent. (Adopted October 7, 1998)
- 2-1-231 Semiconductor Fabrication Area:** A physically identifiable area in a semiconductor manufacturing facility where one or more specific operations in the fabrication of semiconductors or related solid state devices occurs and the equipment used to perform those operations. The semiconductor fabrication area shall not include crystal growth, circuit separation, or encapsulation. All semiconductor fabrication equipment may be grouped into a single fabrication area, or multiple fabrication areas may be established to correspond to product lines or clean room environments. (Adopted October 20, 1999)
- 2-1-232 New Source:** Any source that meets at least one of the following criteria, except sources which lose a permit exemption or exclusion in accordance with Regulation 2-1-424, shall be considered a new source:
- 232.1 Any source constructed or proposed to be constructed after March 7, 1979 but which never had a valid District authority to construct or permit to operate.
- 232.2 Any source which was not in operation for a period of one year or more and did not hold a valid District permit to operate during this period of non-operation, occurring after March 7, 1979.
- 232.3 Any relocation of an existing source to a non-contiguous property, except for a portable source.

- 232.4 Any replacement of a source, including an identical replacement of a source, occurring after March 7, 1979, regardless of when the original source was constructed.
- 232.5 Any replacement of an identifiable source within a group of sources permitted together under a single source number for the purpose of District permitting convenience.
- 232.6 "Rebricking" of a glass furnace where changes to the furnace design result in a change in heat generation or absorption. (Adopted May 17, 2000)

2-1-233 Alter: To make any physical change to, or change in the method of operation of, a source, which may affect emissions. Such changes require a permit to operate, and may require permit conditions, whether or not the alteration results in an emission increase. A change in process stream composition is not an alteration if the source's description in the permit and permit conditions allow for the change in process stream composition, and the change does not increase emissions beyond permitted levels. The following activities are specifically identified as "alterations."

- 233.1 Replacement of burners with non-identical burners.
- 233.2 Maintenance of glass furnaces involving component replacement, unless all replacements are with identical components.
- 233.3 Expansion of the physical boundaries of a semiconductor fabrication area.
(Adopted 5/17/00; Amended 11/15/00)

2-1-234 Modified Source: Any existing source which undergoes a physical change, change in the method of operation of, increase in throughput or production, or addition which results or may result in any of the following:

- 234.1 An increase of either the daily or annual emission level of any regulated air pollutant, or an increase in the production rate or capacity that is used to estimate the emission level, that exceeds emission or production levels approved by the District in any authority to construct.
- 234.2 An increase of either the daily or annual emission level of any regulated air pollutant, or the production rate or capacity that is used to estimate the emission level, above levels contained in a permit condition in any current permit to operate or major facility review permit.
- 234.3 For sources which have never been issued a District authority to construct, and which do not have conditions limiting daily or annual emissions, an increase of either daily or annual emission level of any regulated air pollutant, or the production rate or capacity that is used to estimate the emission level, above the lowest of the following:
 - 3.1 The highest of the following:
 - 3.1.1 The highest attainable design capacity, as shown in pre-construction design drawings, including process design drawings and vendor specifications.
 - 3.1.2 The capacity listed in the District permit to operate.
 - 3.1.3 The highest documented actual levels attained by the source prior to March 1, 2000.
 - 3.2 The capacity of the source, as limited by the capacity of any upstream or downstream process that acts as a bottleneck (a grandfathered source with an emission increase due to debottlenecking is considered to be modified).

For the purposes of applying Section 234.3, only increases in annual emission levels shall be considered for storage vessels.

- 234.4 The emission of any regulated air pollutant not previously emitted in a quantity which would cause the source to fail an air toxic screening analysis performed in accordance with the current Air Toxic Risk Screening Procedure.

For the purposes of applying this definition, an hourly limit or capacity may be converted to a daily limit or capacity by multiplication by 24 hours/day; a daily capacity may be converted to an annual capacity or limit by multiplication by 365 days/year.

- 2-1-235 Shutdown:** An action that either:
- 235.1 Causes an emission source to be removed from service temporarily; or
 - 235.2 Results in a transfer of an emission source's emitting activity to another source within the control of the same operator. (Adopted May 17, 2000)
- 2-1-236 Closure:** Permanent removal of a source from service. (Adopted May 17, 2000)

2-1-300 STANDARDS

- 2-1-301 Authority to Construct:** Any person who, after July, 1972, puts in place, builds, erects, installs, modifies, modernizes, alters or replaces any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, shall first secure written authorization from the APCO in the form of an authority to construct. Routine repairs, maintenance, or cyclic maintenance that includes replacement of components with identical components is not considered to be an alteration, modification or replacement for the purpose of this Section unless the APCO determines the changes to be non-routine. The use or operation of the source shall initiate the start-up period in accordance with Section 2-1-411. (Amended 3/17/82; 10/19/83; 7/17/91; 5/17/00)

- 2-1-302 Permit to Operate:** Before any person, as described in Section 2-1-401, uses or operates any article, machine, equipment or other contrivance, the use of which may cause, reduce or control the emission of air contaminants, such person shall first secure written authorization from the APCO in the form of a permit to operate.

- 302.1 Permit to Operate, MFR: Any facility subject to the requirements of Regulation 2-6, Major Facility Review, shall comply with the permitting requirements included herein in addition to securing a permit to operate under this rule.
- 302.2 Permit to Operate, Accelerated Permitting Program: Installation and operation of a new or modified source or abatement device, which qualifies for the Accelerated Permitting Program under Section 2-1-106, may commence immediately following the submittal of a complete permit application. A temporary Permit to Operate will be issued as soon as the APCO determines that the application is complete. Action shall be taken on the application within 35 working days of receipt of a complete application, in accordance with Section 2-1-408, provided that the applicable offset provisions of Regulation 2, Rule 2, Sections 302 and 303 are satisfied. During periods that the source is operating without a Permit to Operate, the operator shall keep records sufficient to demonstrate that emissions do not exceed qualifying levels for the Accelerated Permitting Program.
- 302.3 Permit to Operate, Temporary Operation: A temporary permit may be obtained to allow an operator to test equipment, processes, or new formulations. A temporary permit may also be obtained for a temporary source which replaces critical equipment during scheduled maintenance. The APCO may issue a non-renewable temporary Permit to Operate a temporary operation at any source, subject to the following:
 - 3.1 The proposed operation will comply with all requirements of Regulation 1 and Regulations 5 through 12.
 - 3.2 The permit shall expire 3 months after issuance.
 - 3.3 The operator shall provide offsets, at a ratio of 1.15 to 1, for all increased emissions of NO_x, POC, and PM₁₀ resulting from the use of the temporary permit.
 - 3.4 The operator shall certify that the temporary operation is for one of the following purposes:
 - 4.1 Equipment testing
 - 4.2 Process testing, including new formulations
 - 4.3 Temporary replacement of an existing permitted source with an identical or functionally equivalent source

- 2-1-303 Fees:** Persons subject to this Regulation shall pay the fees required, as set forth in Regulation 3.
- 2-1-304 Denial, Failure to Meet Emission Limitations:** The APCO shall deny an authority to construct or a permit to operate if the APCO finds that the subject of the application would not or does not comply with the emission limitations of the District, or with applicable permit conditions, federal or California laws or regulations. Such denial shall not be based solely on type of construction or design of equipment.
(Amended March 17, 1982)
- 2-1-305 Denial, Equipment Not in Conformance with Authority to Construct:** The APCO shall deny a permit to operate if it is found that the subject of the application was not built substantially in conformance with the authority to construct.
- 2-1-306 Mandated Reductions Not Applicable:** Emission reductions resulting from requirements of federal, state or District laws, rules or regulations shall not be banked or allowed as emission offsets or emission reduction credits unless a complete application for such banking or emission reduction credits was filed with the District at least 90 days prior to the adoption date of such laws, rules or regulations. Only emission reduction credits exceeding the emission reductions required by measures described in the Air Quality Management Plan or required by permits or orders; and reductions achieved by measures not specified in the Air Quality Management Plan shall be banked or allowed as emission offsets or emission reduction credits.
(Amended 10/7/81; 7/17/91; 6/15/94)
- 2-1-307 Failure to Meet Permit Conditions:** A person shall not operate any article, machine, equipment or other contrivance, for which an authority to construct or permit to operate has been issued, in violation of any permit condition imposed pursuant to Section 2-1-403.
(Adopted 3/17/82; Amended 7/17/91)
- 2-1-308 Fugitive Emissions:** Fugitive emissions shall be included as emissions from a facility. Fugitive emissions shall be subject to all requirements of District Rules and Regulations, including BACT, RACT, offsets, PSD requirements, and Class I Air Quality Related Values and increment protection, to the same extent as emissions that are not fugitive in nature.
(Adopted 10/19/83; Amended 7/17/91)
- 2-1-309 Canceled Application:** The APCO may cancel an application for an authority to construct and a permit to operate if, within 90 days after the application was deemed incomplete, the applicant fails to furnish the requested information or pay all appropriate fees. The 90 day period may be extended for an additional 90 days upon receipt of a written request from the applicant and written approval thereof by the APCO. The APCO shall notify the applicant in writing of a cancellation, and the reasons therefor. A cancellation shall become effective 10 days after the applicant has been notified. The cancellation shall be without prejudice to any future applications.
(Adopted April 6, 1988)
- 2-1-310 Applicability of CEQA:** Except for permit applications which will be reviewed as ministerial projects under Section 2-1-311 or which are exempt from CEQA pursuant to Section 2-1-312, all proposed new and modified sources for which an authority to construct must be obtained from the District shall be reviewed in accordance with the requirements of CEQA.
- 310.1 For those District permit applications which must be reviewed in accordance with the requirements of CEQA, the District will not normally be a Lead Agency under CEQA. Rather, pursuant to CEQA, the Lead Agency will normally be an agency with general governmental powers, such as a city or county, rather than a special purpose agency such as the District.
- 310.2 The issuance of an authority to construct and of a permit to operate for the same new or modified source or stationary source are considered to be parts of the same project for the purposes of CEQA.
- 310.3 The APCO shall not authorize, on an interim basis or otherwise, the installation or operation of any proposed new or modified source, the permitting of which is subject to the requirements of CEQA, until all of the requirements of CEQA have been satisfied.

2-1-311 Ministerial Projects: An application for a proposed new or modified source or stationary source will be classified as ministerial and will accordingly be exempt from the CEQA requirement of Section 2-1-310 if the District's engineering evaluation and basis for approval or denial of the permit application for the project is limited to the criteria set forth in Section 2-1-428 of this rule and to the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. The method for determining whether a given permit application will be classified as ministerial is set forth in Section 2-1-427.

(Adopted 7/17/91; Amended 10/7/98)

2-1-312 Other Categories of Exempt Projects: In addition to ministerial projects, the following categories of projects subject to permit review by the District will be exempt from the CEQA review, either because the category is exempted by the express terms of CEQA (subsections 2-1-312.1 through 312.9) or because the project has no potential for causing a significant adverse environmental impact (subsections 2-1-312.10 and 312.11). Any permit applicant wishing to qualify under any of the specific exemptions set forth in this Section 2-1-312 must include in its permit application CEQA-related information in accordance with subsection 2-1-426.1. In addition, the CEQA-related information submitted by any permit applicant wishing to qualify under subsection 2-1-312.11 must demonstrate to the satisfaction of the APCO that the proposed project has no potential for resulting in a significant environmental effect in connection with any of the environmental media or resources listed in Section II of Appendix I of the State CEQA Guidelines.

312.1 Applications to modify permit conditions for existing or permitted sources or facilities which do not involve any increases in emissions or physical modifications.

312.2 Permit applications to install air pollution control or abatement equipment.

312.3 Permit applications for projects undertaken for the sole purpose of bringing an existing facility into compliance with newly adopted regulatory requirements of the District or of any other local, state or federal agency.

312.4 Permit applications submitted by existing sources or facilities pursuant to a loss of a previously valid exemption from the District's permitting requirements.

312.5 Permit applications submitted pursuant to the requirements of an order for abatement issued by the District's Hearing Board or of a judicial enforcement order.

312.6 Permit applications relating exclusively to the repair, maintenance or minor alteration of existing facilities, equipment or sources involving negligible or no expansion of use beyond that previously existing.

312.7 Permit applications for the replacement or reconstruction of existing sources or facilities where the new source or facility will be located on the same site as the source or facility replaced and will have substantially the same purpose and capacity as the source or facility replaced.

312.8 Permit applications for cogeneration facilities which meet the criteria of Section 15329 of the State CEQA Guidelines.

312.9 Any other project which is exempt from CEQA review pursuant to the State CEQA Guidelines.

312.10 Applications to deposit emission reductions in the emissions bank pursuant to Regulation 2, Rule 4 or Regulation 2, Rule 9.

312.11 Permit applications for a proposed new or modified source or sources or for process changes which will satisfy the "No Net Emission Increase" provisions of District Regulation 2, Rule 2, and for which there is no possibility that the project may have any significant environmental effect in connection with any environmental media or resources other than air quality. Examples of such projects include, but are not necessarily limited to, the following:

11.1 Projects at an existing stationary source for which there will be no net increase in the emissions of air contaminants from the stationary

source and for which there will be no other significant environmental effect;

11.2 A proposed new source or stationary source for which full offsets are provided in accordance with Regulation 2, Rule 2, and for which there will be no other significant environmental effect;

11.3 A proposed new source or stationary source at a small facility for which full offsets are provided from a small facility bank established by the APCO pursuant to Regulation 2-4-414, and for which there will be no other significant environmental effect;

11.4 Projects satisfying the "no net emission increase" provisions of District Regulation 2, Rule 2 for which there will be some increase in the emissions of any toxic air contaminant, but for which the District staff's preliminary health risk screening analysis shows that a formal health risk assessment is not required, and for which there will be no other significant environmental effect. (Adopted 7/17/91; Amended 5/17/00)

2-1-313 Projects Not Exempt From CEQA Review: Notwithstanding the exemptions from CEQA review set forth in Section 2-1-312, such exemptions shall not apply: (i) to any project for which the District staff's preliminary health risk screening analysis shows that a formal health risk assessment must be submitted by the applicant, or (ii) to any project covered by the categories set forth in subsections 2-1-312.1 through 312.9 where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances, or due to cumulative impacts of successive projects of the same type in the same place over time. Such projects shall be reviewed in accordance with the requirements of CEQA. (Adopted July 17, 1991)

2-1-314 Case-by-Case CEQA Determinations: Notwithstanding the requirement of Section 2-1-311, the District shall, for any permit applications which were deemed complete by the District on or before July 17, 1991, review said permit applications on a case-by-case basis in order to determine whether the District's evaluation of the permit application will involve any element of discretion. If as a result of this case-by-case-review, the District determines that the evaluation of the permit application will not involve any element of discretion on its part, then the application may be treated as a ministerial project so long as all of the following conditions are met:

314.1 The District makes a specific written finding to this effect as part of its determination that the permit application is complete;

314.2 The District will merely apply the law to the facts as presented in the permit application; and

314.3 The District's evaluation of the permit application and its decision regarding whether to issue the permit will be limited to the criteria set forth in Section 2-1-428. (Adopted July 17, 1991)

2-1-315 Denial, Failure to Mitigate Significant Adverse Environmental Impacts: For any application for which the District is a Lead Agency under CEQA, where significant adverse environmental impacts have been identified in the District's review of, or in the course of the public comment period on, said application, the APCO shall deny an authority to construct to such new or modified stationary source, as proposed, unless:

315.1 The applicant agrees to implement or carry out such available alternatives or mitigation measures which would, to the extent feasible, avoid or substantially lessen any such significant adverse environmental impacts as a condition for issuance of an authority to construct; or

315.2 The APCO finds that any such available, feasible alternatives or mitigation measures are within the responsibility and jurisdiction of another public agency, and such measures have been adopted by such other agency, or can and should be adopted by such other agency; or

315.3 The APCO finds that there are no feasible alternatives or measures to substantially mitigate the unavoidable adverse environmental effects associated with the project, but that the benefits of the project outweigh such unavoidable adverse environmental effects, and the APCO states in writing the reasons and overriding considerations to support the issuance of the

authority to construct based on the Final EIR and other information in the record notwithstanding the unavoidable adverse environmental effects associated with the project. (Adopted November 20, 1991)

2-1-316 New or Modified Sources of Toxic Air Contaminants or Hazardous Air Pollutants: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302.

316.1 If a new or modified source emits one or more toxic air contaminants in quantities that exceed the limits listed in Table 2-1-316, then the source shall be subject to the requirements of Sections 2-1-301 and 302, unless the owner or operator of the source can demonstrate to the satisfaction of the APCO, within 90 day of request per Regulation 1, Section 441, that the source would pass a risk screening analysis, as defined in Section 2-1-225, performed according to the current Air Toxic Risk Screening Procedure.

316.2 If a new or modified source, or group of related sources, as defined in the District's current Risk Management Policy, in a proposed construction or modification will emit 2.5 or more tons per year of any single hazardous air pollutant or 6.25 or more tons per year of any combination of hazardous air pollutants, then the source or group of sources shall be subject to the requirements of Sections 2-1-301 and 302.

(Adopted 4/16/86; Amended 7/17/91; Renumbered and Amended 6/7/95; Amended 5/17/00)

2-1-317 Public Nuisance Sources: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If any exempt source receives two or more public nuisance violations, under Regulation 1, Section 301 or Section 41700 of the California Health & Safety Code, within any consecutive 180-day period, then the source shall be subject to the requirements of Section 2-1-301 and 302. Such a source will be treated as loss of exemption source under Section 2-1-414, and will be subject to the annual permit to operate fee specified in Regulation 3. This section does not apply to a source that is exempt per section 2-1-113. (Adopted 6/7/95; Amended 5/17/00)

2-1-318 Hazardous Substances: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any new or modified source meeting any of the following criteria shall be subject to the requirements of Regulation 2, Rule 1, Section 301 and/or 302. If a new or modified source at a PSD Major Facility, as defined in Regulation 2, Rule 2, Section 220.3, emits the following air contaminants in excess of the quantities listed below, then it is subject to the requirements of Sections 2-1-301 and 302.

318.1 0.6 ton per year of lead,

318.2 0.007 ton per year of asbestos (excepting demolition, renovation, and waste disposal),

318.3 0.0004 ton per year of beryllium,

318.4 0.1 ton per year of mercury,

318.5 1 ton per year of vinyl chloride,

318.6 3 tons per year of fluorides,

318.7 7 tons per year of sulfuric acid mist, and

318.8 10 tons per year of reduced sulfur compounds (including hydrogen sulfide).

(Adopted 10/19/83; Renumbered and Amended 6/7/95; Amended 5/17/00)

2-1-319 Source Expressly Subject to Permitting Requirements: Notwithstanding any exemption contained in Section 2-1-103 or Section 114 through 128, any source meeting any of the following criteria shall be subject to the requirements of Section 2-1-302:

319.1 The emission rate of any regulated air pollutant from the source is greater than 5 tons per year, after abatement.

319.2 The source is subject to the requirements of Section 2-1-316, 317, or 318.

(Adopted May 17, 2000)

2-1-400 ADMINISTRATIVE REQUIREMENTS

2-1-401 Persons Affected: Any person who has been granted or requires an authority to construct shall secure a permit to operate. Any person who is not required to obtain an authority to construct and who is required to obtain a permit to operate shall secure a permit to operate. In addition, the following shall apply for a permit to operate for any source which is not subject to an exemption per Sections 2-1-103, 105, or 113 through 2-1-129:

- 401.1 On or before July 1, 1980, persons who operate a facility causing emissions of 2.5 tons per year or more of a regulated air pollutant.
- 401.2 On or before July 1, 1980, persons who operate gasoline terminals, bulk plants and facilities that dispense gasoline for sale or dispense more than 60,000 gallons of gasoline per year.
- 401.3 Persons who operate coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment at any facility whose coating, adhesive, dipping, laminating, printing, screening, masking, electrodeposition, resist application, or similar source or equipment consume greater than 30 gallons of coating and emit 150 pounds of VOC per year or more on a facility wide basis, resulting from the applications of coatings. Upon request of the applicant, the APCO may group coating operations which individually emit less than 150 lb/yr into a single facility-wide source, or other convenient grouping.
- 401.4 Persons who operate surface preparation and cleaning equipment or operations which use unheated solvent solutions containing more than 10 percent VOC and which contain more than 1 gallon of solvent or have a liquid surface area of more than 1 ft.², including wipe cleaning operations with a net solvent usage greater than 20 gallons per year, and that emit 150 pounds of VOC per year or more, on a facility-wide basis. Upon request of the applicant, the APCO may group wipe cleaning operations into a single facility-wide source, or other convenient groupings.
- 401.5 Persons who plan to modify an existing source or install a new source which qualifies for the Accelerated Permitting Program in Section 2-1-106 shall first submit a complete permit application, in accordance with Section 2-1-302.2.
- 401.6 Persons who operate a source that is subject to either loss of exemption or exclusion per section 2-1-414 or 2-1-424.
- 401.7 Persons who operate a source constructed after July 1, 1972.

(Amended 4/16/86; 1/7/87; 7/17/91; 6/7/95; 10/7/98; 5/17/00)

2-1-402 Applications: Every application for an authority to construct or a permit to operate shall be submitted to the APCO on the forms specified, and shall contain all of the information required. Sufficient information must be received to enable the APCO to make a decision or a preliminary decision on the application and/or on any exemptions authorized by this Regulation. The APCO may consult with appropriate local and regional agencies to determine whether the application conforms with adopted plans and with local permit requirements.

2-1-403 Permit Conditions: Except as to permit applications reviewed in accordance with Section 2-1-311, the APCO may impose any permit condition that he deems reasonably necessary to insure compliance with federal or California law or District regulations. For any permit application which was reviewed as a ministerial project in accordance with Section 2-1-311, the APCO shall only impose permit conditions as set forth in the District's Permit Handbook for the type of source being permitted. The APCO may require the installation of devices for measurement or analysis of source emissions or ground-level concentrations of air contaminants.

(Amended 7/17/91; 10/7/98)

2-1-404 Changes in Throughput and Hours of Operation: After a permit to operate has been issued, in accordance with subsections 2-1-401.1 through 401.4, changes in hours of operation, fuels, process materials or throughput are allowed only if emissions resulting from such changes are not of such quantity as would cause

denial of an authority to construct after an air quality permit analysis made pursuant to the provisions of Rule 2 of this Regulation. "Change" is the use of a process or fuel not used in the prior 12 months, or a throughput level higher than the highest level in the prior 12 months or total monthly operating hours higher than any month in the prior 12 months.

404.1 The holder of a permit to operate shall advise the APCO not more than 30 days after any changes in hours of operation, fuels, process materials or throughput which might increase emissions.

404.2 The APCO shall act to revoke the permit to operate of any person who fails to comply with the requirements of this Section. (Amended July 17, 1991)

2-1-405 Posting of Permit to Operate: A copy of the permit to operate, including all relevant permit conditions, shall be accessible to personnel who operate the equipment for which the permit has been issued. These documents shall be included on site in the operator's manual, or shall be accessible to the operators electronically.

(Amended 5/17/00; 11/15/00)

2-1-406 Transfer: An authority to construct or a permit to operate shall not be transferable from one facility to another. An authority to construct or a permit to operate shall not be transferable from one person to another without obtaining written permission of the APCO.

2-1-407 Permit Expiration: An authority to construct shall expire two years after the date of issuance, unless substantial use of the authority has begun. However, an authority to construct may be renewed one time for an additional two years, subject to meeting the current BACT and offset requirements of Regulation 2-2-301, 302 and 303, upon receipt of a written request from the applicant and written approval thereof by the APCO prior to the expiration of the initial authority to construct. An authority to construct that has not expired after two years, due to substantial use or renewal, shall expire after four years. (Amended 7/17/91; Amended 10/7/98)

2-1-408 Action on Applications: Except for applications subject to Section 2-1-412, the publication and public notice requirements of Section 2-2-405 or to the provisions of Rule 6 of this Regulation, the APCO shall notify the applicant in writing of approval, approval with conditions, or denial of the application within 35 working days of receipt of a completed application, unless the time is extended with the written consent of the applicant.

408.1 Notwithstanding this 35-working-day limit, the APCO shall not take final action for any project for which an Environmental Impact Report or a Negative Declaration has been prepared until a Final EIR for that project has been certified or a Negative Declaration for that project has been approved, and the APCO has considered the information in that Final EIR or Negative Declaration. For cases in which the 35 working-day time period has elapsed, the APCO shall take final action on the application within 30 days after the certification of the Final EIR or approval of the Negative Declaration. This subsection shall not apply to any project which is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312. Any substantive change to an application which occurs after the evaluation period has commenced shall allow the APCO to start a new completeness review period, and to reset the 35 working-day limit after the application has been deemed complete. (Amended 11/1/89; 7/17/91; 11/20/91; 11/3/93; 6/7/95; 10/7/98)

2-1-409 Regulations in Force Govern: The decision as to whether an authority to construct shall be granted or denied shall be based on federal, state and District BACT and offset regulations in force on the date the application is declared by the APCO to be complete.

2-1-410 Appeal: The following actions of the APCO may be appealed:

410.1 In accordance with Section 42302 of the Health and Safety Code an applicant for an authority to construct which has been denied may request, within 30 days after receipt of the written notice to deny, the Hearing Board of the District to hold a hearing on whether or not the authority to construct was properly denied.

410.2 In accordance with Section 42302.1 of the Health and Safety Code, within 30 days of any decision of the APCO, pertaining to the issuance of an authority to construct, any aggrieved person who, in person or through a representative, appeared, submitted written testimony, or otherwise participated in the action before the District may request the Hearing Board of the District to hold a public hearing to determine whether the authority to construct was properly issued or for an order modifying or reversing that decision. Such appeals shall be filed in writing and contain a summary of the issues to be raised. The Hearing Board shall consider the appeal at a public hearing within 30 days of the filing of the appeal. The Hearing Board may reverse or modify the decision of the APCO if it determines that the decision was erroneous. (Amended 7/17/91; 11/20/91; 5/17/00)

2-1-411 Permit to Operate, Final Action: The APCO shall take final action to approve, approve with conditions, or disapprove a permit to operate a facility subject to this rule within 90 days after the initial date of the start-up period of the new or modified source. This time period may be extended upon the written request of the applicant stating the reasons why further start-up time is needed. In no case shall the APCO allow the start-up period to be greater than 180 days. All conditions, specific or implied, of the authority to construct are in effect during the entire start-up period.

411.1 Notwithstanding the above, final action taken on permits issued pursuant to Rule 6 of this Regulation shall be in accordance with the provisions of Section 2-6-410. (Adopted 10/19/83; Amended 7/17/91; 11/3/93; 10/7/98)

2-1-412 Public Notice, Schools: Prior to approving an application for an authority to construct or permit to operate for a new or modified source located within 1000 feet of the outer boundary of a K-12 schoolsite and which results in the increase in emissions of any substance into the ambient air which has been identified by the California Air Resources Board or the APCO as a toxic air contaminant or a hazardous air contaminant or which is on the list required to be prepared pursuant to subdivision (a) of Section 25532 or Section 44321 subsections (a) to (f) inclusive of the Health and Safety Code, the APCO shall:

412.1 Prepare a public notice in which the proposed new or modified source, and the proposed emissions, are fully described.

412.2 Distribute the notice, prepared in accordance with subsection 2-1-412.1 at the expense of the applicant, to the parents or guardians of children enrolled in any school within one-quarter mile of the source and to each address within a radius of 1000 feet of the source. This notice shall be distributed at least 30 days prior to the date final action on the application is to be taken by the APCO. The APCO shall review and consider all comments received during the 30 days after the notice is distributed, and shall include written responses to the comments in the permit application file prior to taking final action on the application.

412.3 Failure of any person to receive the notice shall not affect the validity of the authority to construct or permit to operate issued by the APCO, if the APCO or applicant responsible for giving the notice has made a good faith effort to follow the procedures for giving the notice prescribed by law.

(Adopted 11/1/89; Amended 10/7/98; 5/17/00)

2-1-413 Portable Equipment Operated Within the District: Any person required to obtain an authority to construct and permit to operate under Sections 2-1-301 and 302 for a portable source can elect to receive a single portable permit which will allow the source to operate anywhere in the District, provided the APCO approves the permit, and the source meets the definition of portable equipment set forth in Section 2-1-220. Such a source is subject to the standard filing, initial and permit to operate fees in Regulation 3. (Adopted June 7, 1995)

2-1-414 Loss of Exemption, Public Nuisance: Any source subject to Section 2-1-317 shall be subject to permit conditions deemed necessary by the District to minimize the potential for future violations. If the owner/operator can demonstrate that the source has neither received a public nuisance violation nor received a confirmed complaint

for a two year period after the permit was issued, then the owner/operator may submit a written petition to the APCO to remove the permit requirement. Such a petition is subject to APCO approval. (Adopted June 7, 1995)

2-1-415 Source Pre-Certification Procedure: Any person may submit a written request to pre-certify a source, for the purposes of qualifying the source for the Accelerated Permitting Program. Such a request will be evaluated within 60 days of receipt of the information listed below. The APCO may also independently pre-certify a source. The APCO shall maintain a list of pre-certified equipment, and shall make this list available to industry through the Public Information & Education Division. A pre-certification request shall include all of the following:

415.1 A complete description of the source, including make, model number, rated capacity and emission calculations at maximum operating rate;

415.2 Applicable BACT requirements;

415.3 Proposed permit conditions governing operation of the source; and

415.4 Applicable fees, as described in Regulation 3, Section 323.

(Adopted June 7, 1995)

2-1-416 Temporary Amnesty for Unpermitted Sources: The APCO has the authority to declare an amnesty period, during which the District may waive all or part of the penalty fees, including late fees and retroactive permit fees, for sources which are currently operating without valid Permits to Operate. (Adopted June 7, 1995)

2-1-420 Suspension: The APCO may suspend a permit if, within a reasonable time, the holder of the permit willfully fails or refuses to furnish requested information, analyses, plans or specifications relating to emissions from the source for which the permit was issued. The APCO shall serve notice in writing of a suspension, and the reasons therefor, on the holder of the permit. A suspension shall become effective 5 days after notice has been served.

2-1-421 Appeal from Suspension: Within 10 days after the receipt of the notice of suspension, the permit holder may request the Hearing Board to hold a hearing to determine whether or not the permit was properly suspended.

2-1-422 Revocation: The APCO may request the Hearing Board to hold a hearing to determine whether an authority to construct and/or permit to operate should be revoked if it is found that the holder of an authority to construct or permit to operate is violating any applicable order, rule or regulation of the District, or is violating any provision or condition of the authority to construct or permit to operate.

(Amended May 17, 2000)

2-1-423 Hearings: Within 30 days after receipt of requests submitted pursuant to Sections 2-1-421 and 422, the Hearing Board shall hold a hearing as provided by Section 42308 of the California Health and Safety Code and may take action as authorized by Section 42309 of the California Health and Safety Code. (Amended July 17, 1991)

2-1-424 Loss of Exemption or Exclusion: Within 90 days of written notification by the APCO of the need for a permit, any person who operates a source which does not require a District permit who loses an exemption or exclusion because of changes in federal, California or District laws or regulations shall submit a complete permit application for the subject source, as defined Section 2-1-202. A person who holds a valid permit to operate for the subject source need not reapply.

(Adopted 4/16/86; Amended 6/7/95; 10/7/98)

2-1-425 Sources of Toxic Air Contaminants: Any person who does not hold a valid permit to operate in accordance with Section 2-1-401 and emits, in quantities determined to be appropriate by the APCO, any toxic air contaminant, shall within 90 days of written notice by the APCO of the need for a permit to operate, complete a permit application for the subject source, in accordance with the applicable requirements of Section 2-1-202 or Section 2-1-302.2. (Amended June 7, 1995)

2-1-426 CEQA-Related Information Requirements: Unless a project for which an authority to construct is sought is exempt from the District's CEQA requirements pursuant to Section 2-1-311 or 2-1-312 of this Rule, applicants for authorities to construct shall provide, as part of a complete application, the following CEQA-related information:

- 426.1 A preliminary environmental study which shall describe the proposed project and discuss any potential significant adverse environmental impacts, alternatives to the project, and any necessary mitigation measures to minimize adverse impacts. The preliminary environmental study shall include all activities involved in the project and shall not be limited to those activities affecting air quality. In preparing the preliminary environmental study, the applicant may utilize the Environmental Information Form in Appendix H of the State CEQA Guidelines or an equivalent format specified by the APCO. (see also Appendix G, Significant Effects.) The preliminary environmental study shall list all other local, state and federal governmental agencies that require permits for the project and indicate any environmental documentation required by such agencies; or
- 426.2 When an agency other than the District is to be the Lead Agency under CEQA, either:
 - 2.1 A Draft or Final Environmental Impact Report prepared by or under the supervision of the Lead Agency; or
 - 2.2 A contract for the preparation of a Draft Environmental Impact Report executed by the Lead Agency together with the Initial Study prepared by the Lead Agency; or
 - 2.3 A Negative Declaration prepared by the Lead Agency; or
 - 2.4 A Notice of Preparation of a Draft EIR prepared by the Lead Agency;
 - 2.5 A copy of the Initial Study prepared by the Lead Agency; or
 - 2.6 A commitment in writing from another agency indicating that it has assumed the role of Lead Agency for the project in question.

(Adopted 11/20/91; Amended 10/7/98)

2-1-427 Procedure for Ministerial Evaluations: The District shall review each permit application prior to finding that it is complete in order to determine whether its evaluation of the permit application is covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook. If the District determines that its evaluation of the permit application is covered by specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and BACT/TBACT Workbook, the District's evaluation of that permit application will be classified as ministerial and the engineering evaluation of the permit application by the District will be limited to the use of said specific procedures, fixed standards and objective measurements. For such projects, the District will merely apply the law to the facts as presented in the permit application, and the District's decision regarding whether to issue the permit will be based only on the criteria set forth in Section 2-1-428 and in the District's Permit Handbook and BACT/TBACT Workbook.

(Adopted 11/20/91; Amended 10/7/98)

2-1-428 Criteria for Approval of Ministerial Permit Applications: If the District classifies a permit application as ministerial pursuant to Section 2-1-427, and as a result of its evaluation of that permit application, the District determines that all of the following criteria are met, the issuance by the District of an Authority to Construct for the proposed new or modified source will be a mandatory ministerial duty.

- 428.1 The proposed new or modified source will comply with all applicable provisions of the District's Rules and Regulations and with all applicable provisions of state and federal law and regulations which the District has the duty to enforce;
- 428.2 The emissions from the proposed project can be calculated using standardized emission factors from published governmental sources, District source test results, established formulas from published engineering and scientific handbooks, material safety data sheets or other similar published literature, manufacturer's warranties or other fixed standards as set forth in the District's Permit Handbook and BACT/TBACT Workbook;
- 428.3 Where Best Available Control Technology is required, BACT for the proposed new or modified source can be determined based on the latest edition of the

ARB's BACT/LAER Clearinghouse, on the District's own compilations of BACT levels for specific types of sources as set forth in the District's Permit Handbook and BACT/TBACT Workbook or on a more stringent BACT level proposed by the project proponent; and

- 428.4 If the proposed new or modified source involves the shutdown of an existing source, the Reasonably Available Control Technology applicable to the source to be shut down can be determined from existing provisions of the District's Rules and Regulations or from the District's own compilations of BACT levels for specific types of sources as set forth in District's Permit Handbook and BACT/TBACT Workbook.

In addition, when the District has issued an authority to construct for a proposed new or modified source as a ministerial project, the issuance of the permit to operate for that source will also be a mandatory ministerial duty if the source will meet all the conditions imposed in connection with the issuance of the authority to construct and all applicable laws, rules and regulations enforced by the District.

(Adopted 11/20/91; Amended 10/7/98)

- 2-1-429 Federal Emissions Statement:** The owner or operator of any source which emits or may emit oxides of nitrogen or volatile organic compounds shall provide the APCO with a written statement, in such form as the APCO prescribes, showing actual emissions of oxides of nitrogen and volatile organic compounds from that source. At a minimum the emission statement shall contain all of the information contained in the Air Resources Board's Emission Inventory Turn Around Document as described in Instructions for the Emission Data System Review and Update Report. The statement shall also contain a certification by a responsible official of the company or facility that the information contained in the statement is accurate to the best knowledge of the individual certifying the statement. Effective November 1, 1994, the statement shall be submitted to the District each year with the annual permit renewal. The APCO may waive this requirement for any class or category of sources which emit less than 25 tons per year of oxides of nitrogen and volatile organic compounds, each taken separately, if the District provides the Air Resources Board with emission inventories of sources emitting greater than 10 tons per year of either oxides of nitrogen or volatile organic compounds based on the use of emission factors acceptable to the Air Resources Board and the U.S. Environmental Protection Agency (EPA). A current list of classes and categories of stationary sources for which this requirement has been waived by the APCO will be kept by the District and made available upon request. Also, for purposes of reporting emission data to the Air Resources Board and to the EPA, the District will provide calendar year and peak ambient ozone season data determined through weighted averaging of current and prior year (if available) company/facility reported certified information. This Section is required by the provisions of Section 182(a)(3)(B) of the Clean Air Act.

(Adopted 11/4/92; Amended 6/15/94; 6/7/95)

- 2-1-430 Maintenance of the Permit Handbook and BACT/TBACT Workbook:** The APCO shall publish and maintain the Permit Handbook and BACT/TBACT Workbook as needed to reflect the current procedure for review and issuance of permits, and the most recent determination of BACT/TBACT for a given source category.

(Adopted October 7, 1998)

- 2-1-431 Date of Completion:** The APCO shall deem an application to be complete on the date that the information and fees required to complete the application were received by the District.

(Adopted May 17, 2000)

2-1-500 MONITORING AND RECORDS

- 2-1-501 Monitors:** Continuous emission monitors required pursuant to Section 2-1-403 shall comply with the provisions of Volume V of the Manual of Procedures.

(Adopted March 17, 1982)

- 2-1-502 Burden of Proof:** Any person asserting that a source is exempt from the requirements of Regulation 2, Rule 1, Section 301 and/or 302, shall, upon the request

of the APCO, provide substantial credible evidence proving to the APCO that the source meets all requirements necessary to qualify for the exemption.

(Adopted May 17, 2000)

2-1-600 MANUAL OF PROCEDURES

2-1-601 Engineering Permitting Procedures: The specific procedures for the engineering evaluation of particular types of sources as well as specific fixed standards and objective measurements upon which the District will rely in its evaluation of ministerial permit applications are set forth in the District's Permit Handbook and BACT/TBACT Workbook.
(Adopted 7/17/91; Amended 10/7/98)

2-1-602 CEQA Guidelines: The District's Guidelines for Environmental Processes under CEQA for those cases in which the District assumes the role of Lead Agency are set forth in Volume VII to the District's Manual of Procedures and in the Permit Handbook.
(Adopted 11/20/91; Amended 6/7/95)

Regulation 2, Rule 1
Permit / Exemption Flow Chart

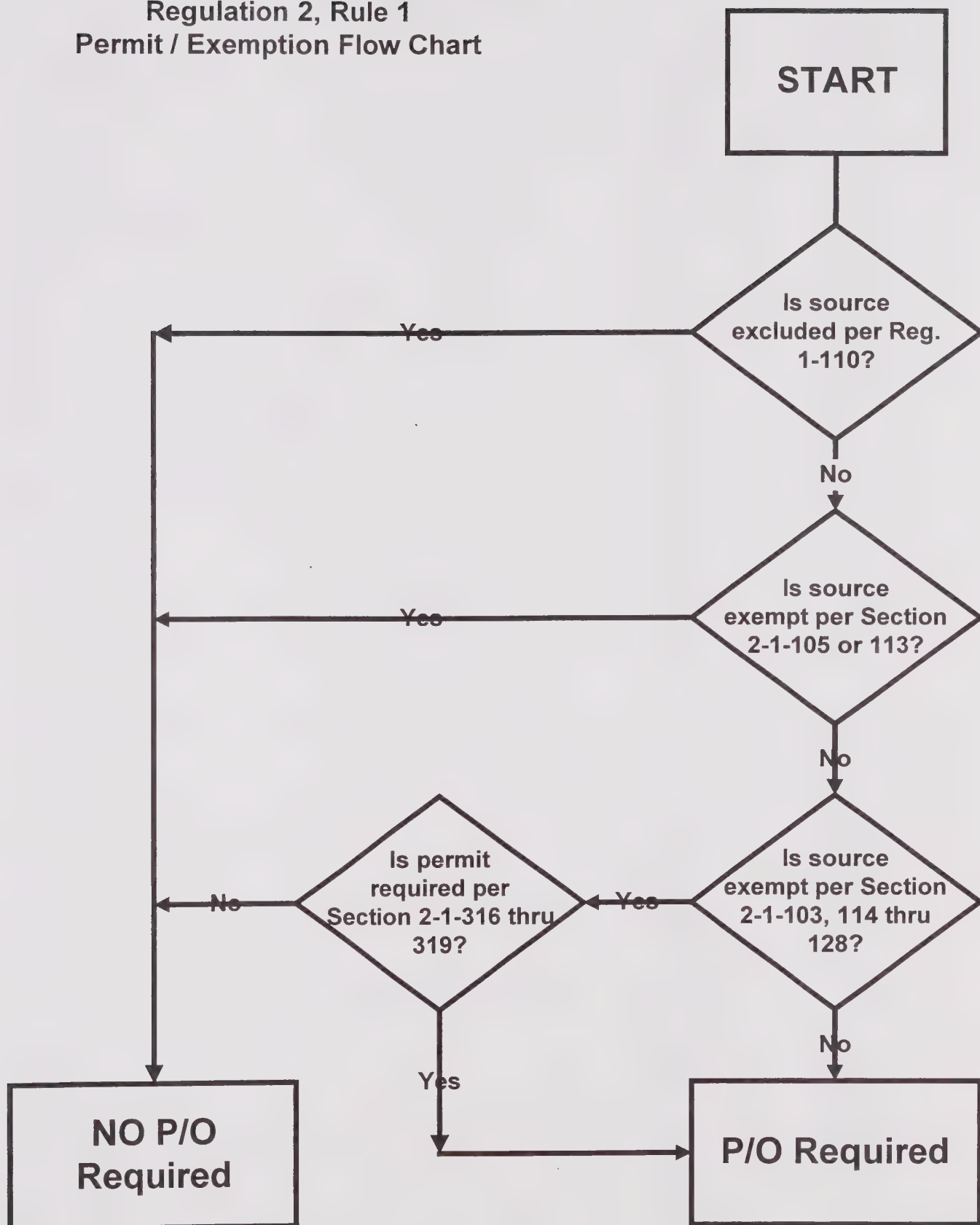


Figure 2-1-101

Table 2-1-316
Toxic Air Contaminant Trigger Levels

Compound	CAS Number	Trigger Level (lb/year)
Acetaldehyde	75070	7.2E+01
Acetamide	603505	9.7E+00
Acrolein	107028	3.9E+00
Acrylamide	79061	1.5E-01
Acrylonitrile	107131	6.7E-01
Allyl chloride	107051	3.3E+01
Aminoanthraquinone, 2	117793	2.1E+01
Ammonia	7664417	1.9E+04
Aniline	62533	1.2E+02
Arsenic and arsenic compounds (inorganic)	7440382*	2.5E-02
Asbestos	1332214	3.0E-03
Benzene	71432	6.7E+00
Benzidine (and its salts)	92875*	1.4E-03
Benzyl chloride (see chlorotoluenes)	100447	3.9E+00
Beryllium and beryllium compounds	7440417*	1.4E-02
Bis(2-chloro-ethyl)ether	111444	2.7E-01
Bis(chloro-methyl)ether	542881	1.5E-02
Bromine and bromine compounds (inorganic)	7726956*	3.3E+02
Butadiene, 1,3-	106990	1.1E+00
Butyl alcohol, tert-	75650	1.4E+05
Cadmium and cadmium compounds	7440439*	4.6E-02
Carbon disulfide	75150	1.4E+04
Carbon tetrachloride	56235	4.6E+00
Chlorinated dibenzodioxins and dibenzofurans (TCDD equivalent)	1746016*	1.2E-06
Chlorinated paraffins	*	7.7E+00
Chlorine	7782505	1.4E+03
Chlorobenzene	108907	1.4E+04
Chlorofluorocarbons	*	1.4E+05
Chloroform	67663	3.6E+01
Chloro-o-phenylenediamine, 4-	95830	4.2E+01
Chloro-o-toluidine, p-	95692	2.5E+00
Chlorophenol, 2-	108430	3.5E+03
Chloropicrin	76062	3.3E+02
Chloroprene	126998	1.9E+03
Chlorotoluenes	100447*	2.3E+03
Chromium (hexavalent) and chromium (hexavalent) compounds	18540299*	1.3E-03
Copper and copper compounds	7440508*	4.6E+02
Cresidine, p-	120718	4.4E+00
Cresol	1319773	3.5E+04
Cupferron	135206	3.1E+00
Diaminoanisole, 2,4-	96128	2.9E+01
Dibromo-3-chloropropane, 1,2- (DBCP)	96128	9.7E-02
Dichlorobenzene, 1,4-	106467	1.8E+01
Dichlorobenzidene, 3,3'-	91941	5.6E-01
Dichloroethane, 1,1-	75343	1.2E+02
Dichloroethylene, 1,1- (see vinylidene chloride)		
Diesel exhaust particulate matter	n/a	6.4E-01
Diethylaminoethanol	100378	2.1E+04

Compound	CAS Number	Trigger Level (lb/year)
Diethylhexylphthalate (DEHP)	117817	8.1E+01
Dimethylaminoazobenzene, p-	60117	1.5E-01
Dimethyl phthalate	131113	2.3E+03
Dimethylamine	124403	3.8+02
Dinitrotoluene, 2,4-	121142	2.1E+00
Diocetyl phthalate	117840	2.3E+03
Dioxane, 1,4-	123911	2.5E+01
Epichlorohydrin	106898	8.3E+00
Ethyl acetate	141786	6.6E+05
Ethyl acrylate	140885	9.3E+03
Ethyl chloride	75003	1.9E+06
Ethylene dibromide (1,2-dibromoethane)	106934	2.7E+00
Ethylene dichloride (1,2-dichloroethane)	107062	8.7E+00
Ethylene oxide	75218	2.1E+00
Ethylene thiourea	96457	1.5E+01
Formaldehyde	50000	3.3E+01
Freons (see Chlorofluorocarbons)		
Glutaraldehyde	111308	3.3E+02
Glycol ethers:		
2-Ethoxy ethanol (cellosolve; ethylene glycol monoethyl ether)	110805	3.9E+04
2-Ethoxyethyl acetate (cellosolve acetate; ethylene glycol monoethyl ether acetate)	111159	1.3E+04
2-Methoxy ethanol (methyl cellosolve; ethylene glycol monomethyl ether)	109864	3.9E+03
2-Methoxyethyl acetate (methyl cellosolve acetate; ethylene glycol monomethyl ether acetate)	110496	1.1E+04
2-Butoxy ethanol (Butyl cellosolve; ethylene glycol monobutyl ether)	111762	3.9E+03
Hexachlorobenzene	118741	3.9E-01
Hexachlorocyclohexanes	58899*	1.8E-01
Hexachlorocyclopentadiene	77474	4.6E+01
Hexane, n-	110543	8.3E+04
Hydrazine	302012	3.9E-02
Hydrogen bromide (hydrobromic acid)	10035106	4.6E+03
Hydrogen chloride	7647010	1.4E+03
Hydrogen cyanide	74908	1.4E+04
Hydrogen fluoride	7664393	1.1E+03
Hydrogen sulfide	7783064	8.1E+03
Isocyanates:		
Methylene-bis-phenyl isocyanate	101688	1.8E+01
Methyl isocyanate	624839	7.0E+01
Toluene diisocyanates	26471625*	1.8E+01
Isophorone	78591	6.6E+04
Isopropyl alcohol	67630	4.4E+05
Lead, inorganic, and lead compounds	7439921*	1.60E+01
Maleic anhydride	108316	4.6E+02
Manganese and manganese compounds	7439965*	7.7E+01
Mercury and mercury compounds (inorganic)	7439976*	5.8E+01
Methyl alcohol (methanol)	67561	1.2E+05

Compound	CAS Number	Trigger Level (lb/year)
Methyl bromide	74839	1.2E+03
Methyl chloroform (1,1,1-TCA)	71556	6.2E+04
Methyl mercury	593748	1.9E+02
Methyl methacrylate	80626	1.9E+05
Methylene bis(2-chloroaniline), 4,4'-	101144	4.4E-01
Methylene chloride	75092	1.9E+02
Methylene dianiline, 4,4'-	101779*	4.2E-01
Methylethylketone (MEK)	78933	1.5E+05
Methylpyrrolidone, N-	872504	1.8E+05
Michler's ketone	90948	7.7E-01
Naphthalene	91203	2.7E+02
Nickel and nickel compounds	7440020*	7.3E-01
Nitric acid	7697372	2.3E+03
Nitrobenzene	98953	3.3E+02
Nitropropane, 2-	79469	3.9E+03
Nitrosodiethylamine, N-	55185	1.9E-02
Nitrosodimethylamine, N-	62759	4.2E-02
Nitroso-n-dibutylamine, N-	924163	1.6E-03
Nitrosodiphenylamine, N-	86306	7.3E+01
Nitrosodiphenylamine, p-	156105	3.1E+01
Nitroso-N-methylethylamine, N-	10595956	3.1E-02
Nitroso-morpholine, N-	59892	1.0E-01
Nitroso-piperidine, N-	100754	7.1E-02
Nitrosodi-n-propylamine, N-	621647	9.7E-02
Nitrosopyrrolidine, N-	930552	3.3E-01
PAHs (including but not limited to):	*	
Benz[a]anthracene	56553	4.4E-02
Benzo[b]fluoroanthene	205992	4.4E-02
Benzo[k]fluoroanthene	205823	4.4E-02
Benzo[a]pyrene	50328	4.4E-02
Dibenz[a,h]anthracene	53703	4.4E-02
Indeno[1,2,3-cd]pyrene	193395	4.4E-02
PCBs (polychlorinated biphenyls)	1336363*	6.8E-03
Pentachlorophenol	87865	3.8E+01
Perchloroethylene (tetrachloroethylene)	127184	3.3E+01
Phenol	108952	8.7E+03
Phosgene	75445	1.8E+02
Phosphine	7803512	1.9E+03
Phosphoric acid	7664382	4.6E+02
Phosphorus (white)	7723140	1.4E+01
Phthalic anhydride	85449	1.4E+06
Potassium bromate	7758012	1.4E+00
Propane sultone, 1,3-	1120714	2.7E-01
Propylene oxide	75569	5.2E+01
Selenium and selenium compounds	7782492*	9.7E+01
Sodium hydroxide	1310732	9.3E+02
Styrene monomer	100425	1.4E+05
Tetrachloroethane, 1,1,2,2-	79345	3.3E+00
Tetrachlorophenols	25167833*	1.7E+04
Tetrahydrofuran	109999	2.7E+05
Thioacetamide	62555	1.1E-01

Compound	CAS Number	Trigger Level (lb/year)
Toluene	108883	3.9E+04
Toluene diisocyanate, 2,4-	584849	1.8E+01
Toluene diisocyanate, 2,6-	91087	1.8E+01
Trichlorobenzene, 1,2,4-	120821	1.8E+04
Trichloroethane, 1,1,1- (see Methyl chloroform)		
Trichloroethane, 1,1,2- (vinyl trichloride)	79005	1.2E+01
Trichloroethylene	79016	9.7E+01
Trichlorophenol, 2,4,6-	88062	9.7E+00
Urethane (ethyl carbamate)	51796	6.6E-01
Vapam (sodium methyldithiocarbamate)	137428	2.2E+04
Vinyl chloride	75014	2.5E+00
Vinylidene chloride	75354	6.2E+03
Xylenes	1330207*	5.8E+04
Zinc and zinc compounds	7440666*	6.8E+03

* -- This is a chemical compound group. If a CAS number is listed, it represents only a single chemical within the chemical class (for metallic compounds, the CAS number of the elemental form is listed; for other compounds, the CAS number of a predominant compound in the group is given).

n/a --No CAS number is available for this compound or compound group.

(Amended 5/17/00; 11/15/00)

**REGULATION 2
PERMITS
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NEW SOURCE REVIEW**

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**REGULATION 2
PERMITS
RULE 2
NEW SOURCE REVIEW**

(Readopted and Renumbered July 17, 1991)

2-2-100 GENERAL

2-2-101 Description: This Rule shall apply to all new and modified sources which are subject to the requirements of Regulation 2-1-301. The purpose of this Rule is to provide for the review of new and modified sources and provide mechanisms, including the use of Best Available Control Technology (BACT), Best Available Control Technology for Toxics (TBACT), and emission offsets, by which authorities to construct such sources may be granted. This rule implements the no net increase requirements of Section 40919 (a)(2) of the Health and Safety Code as demonstrated by the requirements of Section 2-2-316. The New Source Review provisions of 40 CFR 51.165 and the Prevention of Significant Deterioration provisions of 40 CFR 51.166 are hereby incorporated by reference. (Amended 6/15/94; 10/7/98; 5/17/00)

2-2-110 Deleted October 7, 1998

2-2-111 Exemption, PSD Monitoring: The APCO may exempt an applicant from the requirements of subsection 2-2-414.3 provided that the applicant demonstrates by modeling to the satisfaction of the APCO that the cumulative emission increase minus the emission reduction credits from the new or modified facility would cause air quality impacts less than the following, or may exempt an applicant from the requirements of subsection 2-2-414.3 if the existing ambient air quality concentrations in the impact area are no greater than the following:

	(micrograms per cubic meter, $\mu\text{g}/\text{m}^3$)
Carbon monoxide: 8-hr average	575
PM ₁₀ : 24-hr average	10
Sulfur dioxide: 24-hr average	13
Lead: 3-month average	0.1
Mercury: 24-hr average	0.25
Beryllium: 24-hr average	0.0001
Fluorides: 24-hr average	0.25
Vinyl chlorides: 24-hr average	15
Total reduced sulfur: 1-hr average	10
Hydrogen sulfide: 1-hr average	0.2
Reduced sulfur compounds: 1-hr average	10
Nitrogen dioxide: annual average	14

(Amended June 15, 1994)

2-2-112 Exemption, Secondary Emissions From Abatement: The BACT requirements of Section 2-2-301 shall not apply to emissions of secondary pollutants which are the direct result of the use of an abatement device or emission reduction technique which complies with the BACT or BARCT requirements for control of another pollutant. However, the APCO shall require the use of Reasonably Available Control Technology (RACT) for control of these secondary pollutants. The Air Pollution Control Officer shall determine which pollutants are primary and which are secondary for the equipment being evaluated. (Amended 6/15/94; 10/7/98)

2-2-113 Deleted June 15, 1994

2-2-114 Exemption, MACT Requirement: The MACT requirement of Section 2-2-317 shall not apply to the following:

- 114.1 Any source, where the combined increase in potential to emit from all related sources in a proposed construction or modification is less than 10 tons per year of any HAP and less than 25 tons per year of any combination of HAPs.
- 114.2 Any source that has been specifically regulated under a standard promulgated pursuant to Sections 112(d), 112(h), or 112(j) of the federal

Clean Air Act prior to the date that the APCO has issued an Authority to Construct.

- 114.3 Any source that has been specifically exempted from regulation under a standard issued pursuant to Sections 112(d), 112(h), or 112(j) of the federal Clean Air Act.
- 114.4 Any Electric Utility Steam Generating Unit as defined in 40 CFR 63.41, unless and until such time as these units are added to the source category list pursuant to Section 112(c)(5) of the federal Clean Air Act.
- 114.5 Any Research and Development Activities as defined in 40 CFR 63.41.
- 114.6 Any source that is within a source category that has been deleted from the source category list pursuant to Section 112(c)(9) of the federal Clean Air Act.

(Adopted May 17, 2000)

2-2-200 DEFINITIONS

2-2-201 Emission Reduction Credit: Except as provided by subsection 2-2-201.3 an emission reduction, calculated in accordance with Section 2-2-605, which exceeds the emission reductions required by measures in the current Clean Air Plan approved by the BAAQMD or required by federal, state, or District laws, rules, and regulations. To qualify as an emission reduction credit, the emission reduction must be in excess of the reductions achieved by, or achievable by, the source using Reasonably Available Control Technology (RACT), and must also be real, permanent, quantifiable, and enforceable.

201.1 Unless calculated in accordance with the procedures of Section 2-2-605, that portion of an NSR emission cap, which was part of an APCO approved alternative baseline, shall not qualify as an emission reduction credit.

201.2 All emission reduction credits shall be enforceable by permit conditions in the authority to construct and permit to operate, except that, in the case of source closures where no permit is required for the source being shut down, the emission reduction credit shall be enforceable through appropriate contractual provisions in a legally binding and irrevocable written agreement in which provisions will be made expressly for the benefit of the District.

201.3 For the purpose of complying with the PSD requirements of Sections 2-2-111, 304, 305, 306, 308 of this Rule and 40 CFR 51.166, emission reduction credits shall not be adjusted for reductions required by measures in the current Clean Air Plan approved by the BAAQMD which exceed the reductions required by use of Reasonably Available Control Technology (RACT).

The permanence of a closure shall be identified in a letter from the source and/or in a Banking Certificate. (Amended June 15, 1994)

2-2-202 Baseline Area, PSD: All intrastate Air Quality Control Regions, as defined in 40 CFR 52.21, and every part thereof, designated as attainment or unclassifiable under 107(d)(1)(D) or (E) of the Clean Air Act in which a source establishing a baseline date would construct or would have an air quality impact equal to or greater than 1 µg/m³ (annual average) of the pollutant for which the baseline date is established.

2-2-203 Baseline Concentration, PSD: The ambient concentration level which exists in the baseline area on the applicable baseline date. A baseline concentration is determined for each pollutant for which a baseline date is established. The baseline concentration shall include the actual emissions representative of sources in existence on the applicable baseline date. (Amended October 7, 1998)

2-2-204 Baseline Date, PSD: The earliest date after December 20, 1977, for sulfur dioxide and PM₁₀, or after February 8, 1988, for nitrogen dioxide, for each baseline area on which the first complete application under Section 2-2-304 is submitted or was submitted to EPA under 40 CFR 52.21. The baseline date is established for each pollutant for which PSD increments have been established.

2-2-205 Baseline Period, PSD: The period against which a change in emissions is to be measured.

2-2-206 Best Available Control Technology (BACT): For any new or modified source, except cargo carriers, the more stringent of:

- 206.1 The most effective emission control device or technique which has been successfully utilized for the type of equipment comprising such a source; or
- 206.2 The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source; or
- 206.3 Any emission control device or technique determined to be technologically feasible and cost-effective by the APCO; or
- 206.4 The most effective emission control limitation for the type of equipment comprising such a source which the EPA states, prior to or during the public comment period, is contained in an approved implementation plan of any state, unless the applicant demonstrates to the satisfaction of the APCO that such limitations are not achievable. Under no circumstances shall the emission control required be less stringent than the emission control required by any applicable provision of federal, state or District laws, rules or regulations.

The APCO shall publish and periodically update a BACT/TBACT Workbook specifying the requirements for commonly permitted sources. BACT will be determined for a source by using the workbook as a guidance document or, on a case-by-case basis, using the most stringent definition of this Section 2-2-206.

(Amended October 7, 1998)

- 2-2-207 California Coastal Waters:** That area between the California-Oregon border at the Pacific Ocean and ending at the California-Mexico border at the Pacific Ocean:

thence to 42.0°N	125.5°W
thence to 41.0°N	125.5°W
thence to 40.0°N	125.5°W
thence to 39.0°N	125.5°W
thence to 38.0°N	124.0°N
thence to 37.0°N	123.5°W
thence to 36.0°N	122.5°W
thence to 35.0°N	121.5°W
thence to 34.0°N	120.5°W
thence to 33.0°N	119.5°W
thence to 32.5°N	118.5°W

- 2-2-208 CEQA:** The California Environmental Quality Act, Public Resources Code, Section 21000, et seq., and the CEQA guidelines, Title 14, California Code of Regulations, Section 15000, et seq. (Amended May 17, 2000)

- 2-2-209 Class I Areas, PSD:** Point Reyes National Seashore and any other Class I Area under Part C of the Clean Air Act. All other areas in the District are Class II Areas.

- 2-2-210 Deleted May 17, 2000**

- 2-2-211 Contiguous Properties:** Two or more parcels of land with a common boundary or separated solely by a public roadway or other public right-of-way.

- 2-2-212 Cumulative Increase:** The aggregate sum of all increases in emissions of any given pollutant from a facility pursuant to authorities to construct or permits to operate issued after April 5, 1991 (unless a PSD Baseline Date is applicable), excluding emissions from a source which has lost its permit exemption per Regulation 2-1-424.

(Amended 6/15/94; 10/7/98)

- 2-2-213 EIR:** Environmental Impact Report, as defined in Section 21061 of the Public Resources Code.

- 2-2-214 Emission Offsets:** Emission reduction credits which are used to mitigate cumulative increases of emissions. Emission offsets are emission reduction credits, from the District Emissions Bank, approved in accordance with Regulation 2, Rule 4; emission reduction credits from adjacent Districts, provided the applicant demonstrates that the requirements of Clean Air Act Section 173(c)(1) (42 U.S.C. Section 7503(c)(1)) and Health and Safety Code Section 40709.6 have been met or do not apply, or onsite contemporaneous emission reduction credits occurring after the submittal of an application for a new or modified source but prior to the issuance of the permit to operate any such source, calculated in accordance with Section 2-2-605. Notwithstanding any existing permit conditions, that portion of an NSR emission cap, which was based on an APCO approved alternative baseline, may not be used as a

source of offsets unless the proposed reduction is calculated in accordance with procedures specified in Section 2-2-605. (Amended 6/15/94; 5/17/00)

2-2-215 Facility: Any property, building, structure or installation (or any aggregation of facilities) located on one or more contiguous or adjacent properties and under common ownership or control of the same person that emits or may emit any air pollutant and is considered a single major industrial grouping (identified by the first two-digits of the applicable code in The Standard Industrial Classification Manual). In addition, facilities which include cargo loading or unloading from cargo carriers other than motor vehicles shall include the cargo carriers as part of the source which receives or loads the cargo. Accordingly, all emissions from such carriers while operating in the District, or within California Coastal Waters adjacent to the District, shall be included as part of the source emissions.

215.1 For determining the cumulative increase at a facility subject to the offset requirements of Sections 2-2-302 and 303, related sources on a single property or contiguous properties, even though under different ownership, or related sources on non-contiguous properties under the same ownership shall be considered one facility. Related sources are those sources where the operation of one is dependent upon or affects the operation of the other.

215.2 Notwithstanding the definition in Section 2-2-215 above, the emissions related to cargo carriers shall not be included when determining applicability of the requirements of Sections 2-2-304, 2-2-308, 2-6-301, and 2-6-310.

215.3 For determining the cumulative increase at a facility subject to the offset requirements of Sections 2-2-302 and 303, facilities under the same ownership or entitlement to use that are located within a distance of three miles, property line to property line, shall be considered one facility if the facilities have the same first two digits in their Standard Industrial Classification codes, as determined from The Standard Industrial Classification Manual. (Amended November 3, 1993)

2-2-216 Feasible: Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors, not in conflict with the mandated responsibilities and duties of the District.

2-2-217 Federal Land Manager: With respect to any lands in the United States, the Secretary of the department with authority over such lands.

2-2-218 Federally Enforceable: All limitations and conditions that are enforceable by the Administrator of the U. S. EPA, including requirements developed pursuant to 40 CFR Parts 60 (NSPS), 61 (NESHAPS), 63 (HAP), 70 (State Operating Permit Programs) and 72 (Permits Regulation, Acid Rain), requirements contained in the State Implementation Plan (SIP) that are applicable to the District, any District permit requirements established pursuant to 40 CFR 52.21 (PSD) or District regulations approved pursuant to 40 CFR Part 51, Subpart I (NSR), and any operating permits issued under an EPA-approved program that is a part of the SIP and expressly requires adherence to any permit issued under such program.

(Amended November 3, 1993).

2-2-219 Impact Area: The area in which a new or modified facility would have a significant air quality impact.

2-2-220 Deleted May 17, 2000

2-2-221 Major Modification of a Major Facility: Any modification, as defined in Regulation 2-1-234, at an existing major facility that the APCO determines will cause an increase of the facility's emissions by the following amounts or more:

POC:	40 tons per year
NOx:	40 tons per year
SO ₂ :	40 tons per year
PM ₁₀ :	15 tons per year
CO:	100 tons per year

(Amended June 15, 1994)

2-2-222 Modeling, PSD: Estimates of ambient concentrations of pollutants based on applicable air quality models, data bases and other requirements acceptable to the APCO. For modeling required by Sections 2-2-304 through 308 and 414, the air

quality models, data bases and other requirements shall also be in accordance with the "Guideline on Air Quality Models", EPA-450/2-78-027R, July 1986 or as revised). Where an air quality impact model specified in the "Guideline on Air Quality Models" is inappropriate, the model may be modified or another model substituted provided that written approval from the Administrator of the EPA is obtained and the application is submitted for public comment in accordance with Section 2-2-405. Methods such as those outlined in the "Workbook for the Comparison of Air Quality Models", April 1977 (or as revised) shall be used to determine the comparability of air quality models. For modeling compliance with air quality standards, other than federal ambient air quality standards or federal PSD increments, applicable models must be approved by the APCO.

2-2-223 Deleted May 17, 2000

2-2-224 Net Air Quality Benefit: A net improvement of air quality as determined by the APCO resulting from emission reduction credits impacting the same general area affected by the new or modified source and which will be consistent with reasonable further progress towards the attainment of the applicable air quality standard.

(Amended June 15, 1994)

2-2-225 Deleted May 17, 2000

2-2-226 Deleted October 7, 1998

2-2-227 Deleted October 7, 1998

2-2-228 Deleted October 7, 1998

2-2-229 Deleted October 7, 1998

2-2-230 Deleted October 7, 1998

2-2-231 Point of Maximum Ground Level Impact: The ground level geographic location where the projected air pollution concentrations for a given pollutant resulting from the new or modified facility emissions together with the background pollutant concentration for that given pollutant results in the maximum ground level pollutant concentration. The background pollutant concentration means the ambient concentration level resulting from the actual emissions of sources in existence and the projected ambient concentration levels for sources already permitted but not yet in operation. If the general public is effectively excluded from the property on which the point of maximum ground level impact is located, and the property is owned or controlled by the owner of the new or modified facility, such property shall not be considered as the point of maximum ground level impact.

2-2-232 Prevention of Significant Deterioration (PSD) Increments: In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

MAXIMUM ALLOWABLE INCREASE
(micrograms per cubic meter, $\mu\text{g}/\text{m}^3$)

CLASS I

POLLUTANT

Particulate Matter:

PM₁₀ Annual arithmetic mean 4

PM₁₀ 24-hr maximum 8

Sulfur Dioxide:

Annual arithmetic mean 2

24-hr maximum 5

3-hr maximum 25

Nitrogen Dioxide:

Annual arithmetic mean 2.5

CLASS II

Particulate Matter:

PM₁₀ Annual arithmetic mean 17

PM₁₀ 24-hr maximum 30

Sulfur Dioxide:

Annual arithmetic mean 20

24-hr maximum	91
3-hr maximum	512
Nitrogen Dioxide:	
Annual arithmetic mean	25

CLASS III

Particulate Matter:	
PM ₁₀ Annual arithmetic mean	34
PM ₁₀ 24-hr maximum	60
Sulfur Dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
Nitrogen Dioxide:	
Annual arithmetic mean	50

For any period other than an annual period, the applicable increase may be exceeded during one such period per year at any one location. (Amended June 15, 1994)

- 2-2-233 Significant Air Quality Impacts, PSD:** Ambient air concentrations, resulting from new or modified facility emissions, that exceed any of the following levels:

SIGNIFICANT AIR QUALITY IMPACTS (micrograms per cubic meter, $\mu\text{g}/\text{m}^3$)

POLLUTANT

Particulate Matter:	
PM ₁₀ , Annual arithmetic mean	1.0
PM ₁₀ , 24-hr maximum	5
Sulfur Dioxide:	
Annual arithmetic mean	1.0
24-hr maximum	5
3-hr maximum	25
Nitrogen Dioxide:	
Annual arithmetic mean	1.0
1-hr maximum	19
Carbon Monoxide:	
8-hr maximum	500
1-hr maximum	2000

(Amended June 15, 1994)

- 2-2-234 Source:** Any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants.
- 2-2-235 Year, Month, and Day:** Unless otherwise defined, a year shall be any rolling 365 consecutive day period, a month shall be any rolling 31 consecutive day period and a day shall be any rolling 24 consecutive hour period.
- 2-2-236 Hazardous Air Pollutant (HAP):** Any pollutant that is listed pursuant to Section 112(b) of the federal Clean Air Act. (Adopted 11/3/93; Amended 5/17/00)
- 2-2-237 Major Facility Review (MFR):** Plantwide review of sources, emissions and regulatory requirements at facilities including, but not limited to, major facilities, phase II acid rain facilities, subject solid waste incinerator facilities, designated facilities, and synthetic minor facility candidates, which are potentially subject to the permitting requirements of Regulation 2, Rule 6, and Title V of the federal Clean Air Act. (Adopted November 3, 1993)
- 2-2-238 Deleted May 17, 2000**
- 2-2-239 Deleted May 17, 2000**
- 2-2-240 Best Available Retrofit Control Technology (BARCT):** An emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy and economic impacts by each class or category of source and has been adopted or proposed to be adopted as part of the current Clean Air Plan required by the California Clean Air Act of 1988. (Adopted June 15, 1994)
- 2-2-241 Deleted May 17, 2000**

- 2-2-242 Contemporaneous:** The five year period of time immediately prior to the date of application for an authority to construct or permit to operate. (Adopted June 15, 1994)
- 2-2-243 Reasonably Available Control Technology (RACT):** For sources which are to continue operating, RACT is the lowest emission limit that can be achieved by the specific source by the application of control technology taking into account technological feasibility and cost-effectiveness, and the specific design features or extent of necessary modifications to the source. For sources which are or will be shut-down, RACT is the lowest emission limit that can be achieved by the application of control technology to similar, but not necessarily identical categories of sources, taking into account technological feasibility and cost-effectiveness of the application of the control technology to the category of sources only and not to the shut-down source. (Adopted June 15, 1994)
- 2-2-244 Best Available Control Technology for Toxics (TBACT):** For any new or modified source, except cargo carriers, the more stringent of:
- 244.1 The most effective emission control device or technique which has been successfully utilized for the type of equipment comprising such a source; or
 - 244.2 The most stringent emission limitation achieved by an emission control device or technique for the type of equipment comprising such a source; or
 - 244.3 Any control device or technique or any emission limitation that the APCO has determined to be technologically feasible for the type of equipment comprising such a source, while taking into consideration the cost of achieving emission reductions, any non-air quality health and environmental impacts, and energy requirements; or
 - 244.4 The most stringent emission control for a source type or category for which a Maximum Achievable Control Technology (MACT) standard has been proposed, or for which the CARB has developed an Airborne Toxic Control Measure (ATCM). Under no circumstances shall the emission control required be less stringent than the emission control required by any applicable provision of federal, state or District laws, rules, regulations or requirements.
- The APCO shall publish and periodically update a BACT/TBACT Workbook specifying the requirements for commonly permitted sources. TBACT will be determined for a source by using the workbook as a guidance document or, on a case-by-case basis, using the most stringent definition of this Section 2-2-244. (Adopted May 17, 2000)
- 2-2-245 Fully Offset:** An emission cap or emission rate contained in a permit condition is fully offset if offsets were provided for the entire amount of the emission cap or emission rate, and the entire amount of offsets is composed of contemporaneous emission reductions or banked emission reduction credits. (Adopted May 17, 2000)
- 2-2-246 Adjustment to Emission Reductions for Federal Purposes:** An adjustment made, for purposes of the equivalence demonstration in 2-2-423, to an emission reduction, due to changes in federal requirements between issuance of a banking certificate and its use. The adjustment is made as if the source providing the offsets were in operation, at the original baseline levels, on the date of credit use. (Adopted May 17, 2000)
- 2-2-300 STANDARDS**
- 2-2-301 Best Available Control Technology Requirement:** An applicant for an authority to construct or a permit to operate shall apply BACT to any new or modified source:
- 301.1 Which results in an emission from a new source or an increase in emissions from a modified source and which has the potential to emit 10.0 pounds or more per highest day of precursor organic compounds (POC), non-precursor organic compounds (NPOC), nitrogen oxides (NOx), sulfur dioxide (SO₂), PM₁₀ or carbon monoxide (CO). BACT shall be applied for any of the above pollutants which meets both criteria. (Amended 6/15/94; 10/7/98; 5/17/00)
- 2-2-302 Offset Requirements, Precursor Organic Compounds and Nitrogen Oxides, NSR:** Except as provided by Sections 2-2-313 or 421, before the APCO may issue an authority to construct or a permit to operate for a new or modified source at a facility

which emits 50 tons per year or more or will be permitted to emit 50 tons per year or more, on a pollutant specific basis, of precursor organic compounds or nitrogen oxides, federally enforceable emission offsets shall be provided, for the emission from the new or modified source and any pre-existing cumulative increase, minus any onsite contemporaneous emission reduction credits determined in accordance with Section 2-2-605, at a 1.15 to 1.0 ratio; additionally, the applicant must reimburse the District Small Facility Banking Account for any unreimbursed offsets previously provided by the District, at a 1.0 to 1.0 ratio. Before the APCO may issue an authority to construct or a permit to operate for a new or modified source at a facility which emits or will be permitted to emit more than 15 tons per year but less than 50 tons per year, on a pollutant specific basis, of precursor organic compounds or nitrogen oxides, emission offsets shall be provided, by the District (or by the applicant, if the Small Facility Banking account has been exhausted) at a 1.0 to 1.0 ratio for the emission from the new or modified source and any pre-existing cumulative increase, minus any onsite contemporaneous emission reduction credits determined in accordance with Section 2-2-605, from the Small Facility Banking account in the District's Emissions Bank in accordance with the provisions of Regulations 2-4-414. The APCO shall determine the total facility emissions, on a pollutant specific basis, by adding the emissions from the proposed new or modified source(s) to the most recent District Emissions Inventory, adjusted for any errors and adjusted upward for any permitted levels of emissions not currently being emitted.

302.1 Deleted May 17, 2000

302.2 Emission reduction credits of precursor organic compounds may be used to offset increased emissions of nitrogen oxides at the offset ratio specified above in Section 2-2-302, provided that the PSD requirements of Section 2-2-304, if applicable, are met. (Amended 11/20/91; 6/15/94; 10/7/98; 5/17/00)

2-2-303 Offset Requirement, PM₁₀ and Sulfur Dioxide, NSR: Except as provided by Section 2-2-421, before the APCO may issue an authority to construct or a permit to operate for a new or modified source, of PM₁₀ or sulfur dioxide located at a Major Facility, which will result in a cumulative increase minus any contemporaneous emission reduction credits at the facility, for that pollutant, in excess of 1.0 ton per year since April 5, 1991, emission offsets shall be provided, for the emission from the new or modified source and any pre-existing cumulative increase, minus any onsite contemporaneous emission reduction credits determined in accordance with Section 2-2-605, at a 1.0:1.0 ratio or at a ratio, approved by the APCO, in accordance with subsection 2-2-303.1.

303.1 Emission reduction credits of nitrogen oxides and/or sulfur dioxide may be used to offset increased emissions of PM₁₀ at offset ratios determined by the APCO to result in a net air quality benefit. This determination shall be made after a case-by-case analysis that includes adequate modeling, public notice and opportunity for public comment, and EPA concurrence.

A facility which emits less than 100 tons of any pollutant, subject to this section, may voluntarily provide emission offsets for all, or any portion, of their cumulative increase, at the ratio required above. (Amended 11/20/91; 6/15/94; 5/17/00)

2-2-304 PSD Requirement: In accordance with the Prevention of Significant Deterioration provisions of 40 CFR 51.166 of the Code of Federal Regulations, the APCO shall not issue an authority to construct or a permit to operate to:

304.1 A new major facility which will emit 100 tons per year or more, if, it is one of the twenty eight (28) PSD source categories listed in Section 169(1) of the federal Clean Air Act, or 250 tons per year or more for an unlisted category, of any pollutant subject to regulation under the federal Clean Air Act unless the applicant demonstrates by modeling in accordance with Section 2-2-414 to the satisfaction of the APCO that such emissions will not interfere with the attainment or maintenance of the applicable sulfur dioxide or nitrogen dioxide NAAQS at the point of maximum ground level impact and will not cause an exceedance of a sulfur dioxide or a nitrogen dioxide PSD increment.

304.2 A major modification of a major facility if the cumulative increase, from the PSD Baseline Date, minus the contemporaneous emission reduction credits at the facility are in excess of 40 tons per year of sulfur dioxide or nitrogen

oxides unless the applicant demonstrates by modeling in accordance with Section 2-2-414 to the satisfaction of the APCO that such emissions will not interfere with the attainment or maintenance of the applicable sulfur dioxide or nitrogen dioxide NAAQS at the point of maximum ground level impact and will not cause an exceedance of a sulfur dioxide or a nitrogen dioxide PSD increment.

304.3 A major modification of a major facility if the cumulative increase, from the PSD Baseline Date, minus the contemporaneous emission reduction credits at the facility are in excess of 15 tons per year of PM₁₀ unless the applicant demonstrates by modeling in accordance with Section 2-2-414 to the satisfaction of the APCO that such emission will not interfere with the attainment or maintenance of the PM₁₀ federal ambient air quality standard at the point of maximum ground level impact and will not cause an exceedance of a PM₁₀ PSD increment.

304.4 A major modification of a major facility if the cumulative increase, from the PSD Baseline Date, minus the contemporaneous emission reduction credits at the facility are in excess of 0.6 tons per year of lead unless the applicant demonstrates by modeling in accordance with Section 2-2-414 to the satisfaction of the APCO that such emission will not interfere with the attainment or maintenance of the lead federal ambient air quality standard at the point of maximum ground level impact and will not cause an exceedance of a lead PSD increment. (Amended 6/15/94; 5/17/00)

2-2-305 Carbon Monoxide Modeling Requirement, PSD: In accordance with the Prevention of Significant Deterioration provisions of 40 CFR 51.166 of the Code of Federal Regulations, the APCO shall not issue an authority to construct or a permit to operate for:

305.1 A new major facility which will emit 100 tons per year or more, if it is one of the twenty eight (28) PSD source categories listed in Section 169(1) of the federal Clean Air Act, or 250 tons per year or more for an unlisted category, of any pollutant subject to regulation under the federal Clean Air Act, unless the applicant demonstrates by modeling in accordance with Section 2-2-414, to the satisfaction of the APCO, that the net air quality impact of the cumulative increase of emissions of CO from the new or modified facility and all contemporaneous emission reduction credits to be provided by the applicant will not interfere with the attainment or maintenance of the CO NAAQS in the District or any contiguous air basin, or

1.1 The cumulative increase minus the contemporaneous emission reduction credits from the facility are less than or equal to zero.

305.2 A major modification of a major facility with an increase of 100 tons per year or more of carbon monoxide, unless the applicant demonstrates by modeling in accordance with Section 2-2-414, to the satisfaction of the APCO, that the net air quality impact of the cumulative increase of emissions of CO from the new or modified facility and all contemporaneous emission reduction credits to be provided by the applicant will not interfere with the attainment or maintenance of the CO NAAQS in the District or any contiguous air basin, or

2.1 The cumulative increase minus the contemporaneous emission reduction credits from the facility are less than or equal to zero.

(Amended 6/15/94; 5/17/00)

2-2-306 Non-Criteria Pollutant Analysis, PSD: In accordance with the Prevention of Significant Deterioration provisions of 40 CFR 51.166 of the Code of Federal Regulations, unless the applicant has performed all analysis required by Sections 2-2-414 and 417 for the applicable pollutants, the APCO shall not issue an authority to construct or a permit to operate to a new or modified facility if the new or modified facility will emit greater than 100 tons per year of carbon monoxide, PM₁₀, sulfur dioxide, precursor organic compounds or nitrogen oxides, and the increase in emissions due to the permit application, minus the onsite contemporaneous emission reduction credits associated with the permit application are in excess of the annual average amounts specified below:

	ANNUAL AVERAGE		DAILY	
	kg/yr	(ton/yr)	g/day	(lb/day)
Lead	530	(0.6)	1450	(3.2)
Asbestos	6	(0.007)	17	(0.04)
Beryllium	0.3	(0.0004)	0.9	(0.002)
Mercury	88	(0.1)	240	(0.5)
Fluorides	2720	(3)	7450	(16)
Sulfuric Acid Mist	6350	(7)	17400	(38)
Hydrogen Sulfide	9050	(10)	24800	(55)
Total Reduced Sulfur	9050	(10)	24800	(55)
Reduced Sulfur Compounds	9050	(10)	24800	(55)

(Amended 6/15/94; 5/17/00)

2-2-307 Denial, Failure of all Facilities to be in Compliance: The APCO shall deny an authority to construct for a new major facility or a major modification of an existing major facility unless the applicant provides a list, certified under penalty of perjury, of all major facilities within the state of California owned or operated by the applicant or by any entity controlling, controlled by, or under common control with the applicant and demonstrates by certifying under penalty of perjury that they are either in compliance, or on a schedule of compliance, with all applicable state and federal emission limitations and standards. The APCO may request the applicant to provide any technical information used by the applicant to certify compliance.

(Amended June 15, 1994)

2-2-308 Class I Area Requirements, PSD: A facility for which the cumulative increases minus the contemporaneous emission reduction credits occurring since the PSD Baseline Date, are greater than zero, and which would construct in a Class I Area or within 10 kilometers (6.2 miles) of a Class I Area, and would have an impact on such area equal to or greater than 1 microgram per cubic meter, shall use BACT on the new or modified facility and shall not cause or contribute to the exceedance of any NAAQS at the point of maximum ground level impact or any PSD increment set forth in Section 2-2-232, and shall perform all analyses required by Sections 2-2-414 and 417.

(Amended June 15, 1994)

2-2-309 Denial for Air Quality Related Values, PSD: The APCO shall deny any permit application subject to the requirements of Section 2-2-308 where it has been demonstrated by the Federal Land Manager that the permit would authorize emissions which would have an adverse impact on the air-quality-related values (including visibility) of a Class I Area, provided that such demonstration is completed prior to the termination of the public comment period and that the APCO concurs with that demonstration.

2-2-310 Denial, Failure to Use BACT: The APCO shall deny an authority to construct if the APCO finds that the application is subject to Section 2-2-301 and, after notification in writing, the applicant has not provided a control device or technique meeting the requirements defined in Section 2-2-206.

2-2-311 Denial, Failure to Provide Offsets: The APCO shall deny an authority to construct if the APCO finds that the application is subject to Sections 2-2-302 or 303 and, after notification in writing, the applicant has not provided the required offsets to mitigate the emissions increase.

2-2-312 Denial, Failure to Meet Permit Conditions: The APCO shall deny a permit to operate, after providing written notification to the applicant, if the equipment is operating in violation of any condition specified in the authority to construct, or if any source used to provide offsets for the project that is owned or operated by the applicant is operating in violation of any permit condition limiting emissions such that the required offsets are not being provided.

2-2-313 Deleted May 17, 2000

2-2-314 Federal New Source Review Applicability: The requirements of 40 CFR 51.165 are incorporated, by reference, as part of this rule. (Adopted June 15, 1994)

2-2-315 Federal Prevention of Significant Deterioration Applicability: The requirements of 40 CFR 51.166 are incorporated, by reference as part of this rule.

(Adopted June 15, 1994)

2-2-316 No Net Increase Status Report: The APCO shall publish in conjunction with the triennial update of the Clean Air Plan (CAP), a report demonstrating that the District's permitting program complies with the no net increase requirements of Section 40919 (b) of the Health and Safety Code. This report shall demonstrate that sufficient offsets have been provided, as required by Section 2-2-302, for all permits issued during the previous three year CAP period. This report shall be forwarded to the California Air Resources Board, Stationary Source Division for approval. (Adopted June 15, 1994)

2-2-317 Maximum Achievable Control Technology (MACT) Requirement: The APCO shall not issue an Authority to Construct for a new or modified source at a Major Facility of Hazardous Air Pollutants unless the source will meet Best Available Control Technology for Toxics (TBACT), except as provided in Section 2-2-114.

(Adopted May 17, 2000)

2-2-400 ADMINISTRATIVE REQUIREMENTS

2-2-401 Application: In addition to the requirements of Regulation 2-1-402, applications for authorities to construct facilities subject to Rule 2 shall include all of the following:

401.1 For new facilities, which will emit, and for a modification which will increase emissions more than 100 tons per year of carbon monoxide or 40 tons per year of either precursor organic compounds or nitrogen oxides, an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source which demonstrate that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction or modification.

401.2 The information required by the lists and criteria adopted pursuant to Section 65940 of the California Government code that are in effect on the date the application is filed.

401.3 CEQA-related information which satisfies the requirements of Regulation 2-1-426.

401.4 All information specified in 40 CFR 63.43(e), if the application is subject to the MACT requirement of Section 2-2-317.

(Amended 11/20/91; 6/15/94; 5/17/00)

2-2-402 Determination of Complete Application: Except for an application which is subject to the publication and public comment requirements of Section 2-2-405, the APCO shall determine whether an application for an authority to construct is complete not later than 15 working days following receipt of the application, or after a longer time period agreed upon by both the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the information that is required. Upon receipt of any resubmittal of the application a new 15 working day period to determine completeness shall begin. For an application which is subject to the publication and public comment requirements of Section 2-2-405, the completeness review period(s) shall be 30 days. The application shall be deemed complete on the date of receipt of all information required for completeness. Upon determination that the application is complete, the APCO shall notify the applicant in writing. If applicable, such written notification shall include the District's determination that its evaluation of the application will be covered by the specific procedures, fixed standards and objective measurements set forth in the District's Permit Handbook and that the District's evaluation of that permit application will be classified as ministerial and will accordingly be exempt from CEQA review. Thereafter only information regarding offsets, or information to clarify, correct or otherwise supplement the information submitted in the application may be requested.

(Amended 6/7/95; 10/7/98)

2-2-403 Deleted October 7, 1998

2-2-404 Authority to Construct, Preliminary Decision: Within 90 days following the acceptance of an application as complete, which is subject to the requirements of Section 2-2-405, or longer period necessary to satisfy the requirements of Section 2-2-414, providing that any fees required in accordance with Regulation 3 are paid, or with the consent of the applicant, such longer period as may be agreed upon, the APCO shall make a preliminary decision as to whether an authority to construct shall

be approved, or denied. Final action on this application will be taken in accordance with the requirements of Section 2-2-407.

404.1 When the District is the CEQA Lead Agency for a project, the 90-day limit for issuing a preliminary decision shall be suspended until the draft EIR or Negative Declaration is available for the APCO's consideration and public review.
(Amended 11/20/91; 5/17/00)

2-2-405 Publication and Public Comment: If the application is for a new major facility or a major modification of an existing major facility, or requires a PSD analysis, or is subject to the MACT requirement, the APCO shall within 10 days of the notification of the applicant, cause to have published in at least one newspaper of general circulation within the District, a prominent notice stating the preliminary decision of the APCO, the location of the information available pursuant to Section 2-2-406, and inviting written public comment for a 30 day period following the date of publication. Written notice of the preliminary decision shall be sent to the ARB, the regional office of the EPA and adjacent districts. A copy of this notice shall be provided to any person who requests such specific notification in writing. During this period, which may be extended by the APCO, the APCO may elect to hold a public meeting to receive verbal comment from the public. The written notice shall contain the degree of PSD increment consumed.

405.1 In addition to the above requirements, for any application for which the District is a Lead Agency under CEQA, the public notice required pursuant to this Section 2-2-405 shall provide public notice of the availability of a Draft EIR, a Negative Declaration or a Notice of Exemption, as applicable.

(Amended May 17, 2000)

2-2-406 Public Inspection: The APCO shall make available for public inspection, at District headquarters, the information submitted by the applicant, and if applicable the APCO's analysis, and the preliminary decision to grant or deny the authority to construct including any proposed conditions, including the reasons therefore. In making information available for public inspection, the confidentiality of trade secrets, as designated by the applicant prior to completion of the application, shall be considered in accordance with Section 6254.7 of the Government Code. Furthermore, all such information shall be transmitted, upon the date of publication, to the ARB and the regional office of the EPA if the application is subject to the requirements of Section 2-2-405.

2-2-407 Authority to Construct, Final Action: If the application is for a new major facility or a major modification of an existing major facility, or requires a PSD analysis, or is subject to the MACT requirement, the APCO shall within 180 days following the acceptance of the application as complete, or a longer time period agreed upon, take final action on the application after considering all public comments. Written notice of the final decision shall be provided to the applicant, the ARB and the EPA, and, if the District is a Lead Agency under CEQA, to any person who has commented on a Draft EIR. The final action will also be published in at least one newspaper of general circulation within the District, and the notice and supporting documentation shall be available for public inspection at District headquarters.

407.1 Notwithstanding the requirement of this Section 2-2-407 that the APCO shall act within 180 days after the application is accepted as complete, the APCO shall not take final action on the application for any project for which an Environmental Impact Report or a Negative Declaration has been prepared pursuant to the requirements of CEQA until a Final EIR for that project has been certified and the APCO has considered the information contained in that Final EIR, or a Negative Declaration for that project has been approved. If the specified 180 day period has elapsed prior to the certification of the Final EIR or the approval of the Negative Declaration, the APCO shall take final action on the application within 30 days after the certification of the Final EIR or approval of the Negative Declaration.
(Amended May 17, 2000)

2-2-408 Deleted May 17, 2000.

2-2-409 Requirements, Permit to Operate: As a condition for the issuance of a Permit to Operate, the APCO shall require that the new or modified source and the sources

which provide offsets be operated in the manner assumed in making the analysis required to determine compliance with this Regulation.

409.1 The permit to operate of any source used to provide offsets shall be conditioned to insure that the emission reductions will be enforceable and shall continue for the reasonably expected life of the proposed source. If offsets are obtained from a source for which there is no permit to operate, either a permit shall be obtained or a written contract shall be required between the applicant and the owner or operator of such source, which contract, by its terms, shall be enforceable by the APCO to ensure that such reductions will continue for the duration of the life of the proposed source.

2-2-410 Issuance, Permit to Operate: The APCO shall issue a permit to operate a source subject to the requirements of this Rule if it is determined that any offsets required, as a condition of an authority to construct or amendment to a permit to operate, will commence no later than the initial operation of the new source or within 90 days after initial operation of the modified source, and that the offsets shall be maintained throughout the operation of the new or modified source which is the beneficiary of the offsets. Further, the APCO shall determine that all conditions specified in the authority to construct have been or will be likely complied with by any dates specified. Where a new or modified source is, in whole or in part, a replacement for an existing source on the same property, the APCO may allow a maximum of 90 days as a start-up period for simultaneous operation of the existing source and the new source or replacement.

2-2-411 Permit to Operate, Final Action: The APCO shall take final action to approve, approve with conditions, or disapprove a permit to operate a source subject to this Rule within 60 days after start-up of the new or modified source. However, failure to act within the 60 day period, unless the time period is extended with the written concurrence of the applicant, shall be deemed to be a denial of the permit. Such denial may be appealed to the Hearing Board in accordance with the provisions of Regulation 2-1-410. (Amended November 20, 1991)

2-2-412 Source Obligation, Relaxation of Enforceable Conditions: At such time as the applicability of any requirement of this Rule would be triggered by an existing source or facility, solely by virtue of a relaxation of any enforceable limitation on the capacity of the source or facility to emit a pollutant, then the requirements of this Rule shall apply to the source or facility in the same way as they would apply to a new or modified source or facility otherwise subject to this Rule.

2-2-413 Deleted May 17, 2000.

2-2-414 PSD Air Quality Analysis: An application for an authority to construct a facility subject to the requirements of Sections 2-2-304, 305, 306 or 308 shall contain the following:

414.1 A modeling analysis, as defined in Section 2-2-222, demonstrating to the satisfaction of the APCO the air quality impacts of the new or modified facility (including impacts of non-criteria pollutants if required under Section 2-2-306). The analysis shall include meteorological and topographic data necessary to estimate such impact. If the maximum air quality impacts of the new or modified facility do not exceed the significance levels for air quality impacts, as defined in Section 2-2-233, no further analysis under this Section will be required unless the facility is subject to the Class I area requirements of Section 2-2-308.

414.2 A demonstration by modeling to the satisfaction of the APCO that the allowable emission increases from the new or modified facility, in conjunction with all other applicable emissions, would not cause or contribute to a violation of an air quality standard or an exceedance of any applicable PSD increment. A new or modified facility will be considered to cause or contribute to a violation of an air quality standard when the increase in emissions would cause a significant air quality impact at any locality that does not or would not meet the applicable air quality standard.

414.3 For determining whether the emission increases from the new or modified facility would cause or contribute to an air quality standard violation or an exceedance of a PSD increment, an analysis of the existing air quality in the impact area of the new or modified facility that includes one year of

continuous ambient air quality monitoring data. The continuous air quality monitoring data shall have been gathered over a period of at least one year preceding the receipt of a complete application. The APCO may approve a shorter period (but not less than four months) provided that the period of monitoring includes the time frame when maximum concentrations are expected. The APCO may approve modeling in lieu of ambient air quality monitoring for pollutants for which no air quality standard exists.

414.4 For pollutants for which PSD increments have been established, a PSD increment consumption analysis that includes:

- 4.1 Establishment of the baseline area(s) affected by the new and modified facility, and the corresponding baseline date(s);
- 4.2 An analysis of the air quality impact of all increment-consuming emissions within the impact area of the new or modified facility, and those increment-consuming emissions outside the impact area that may have a significant air quality impact within the impact area; and,
- 4.3 An analysis of the air quality impact, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since the baseline date in the impact area of the new or modified facility.

2-2-415 Notice to EPA and Federal Land Manager: On the date of a complete application subject to Section 2-2-308, the APCO shall provide a copy of the complete application to the EPA, the Federal Land Manager for the affected Class I Area, and to the federal official charged with direct responsibility for management of any lands within the Class I area. The APCO shall also send a copy of the preliminary decision and the APCO's analysis to the above agencies.

2-2-416 Report, PSD Increment Consumption: The District shall conduct an annual review of the increment status for each attainment pollutant, and the APCO, upon request of the Board of Directors, shall provide a report on the consumption of PSD increments which have occurred during the period of interest.

2-2-417 Visibility, Soils, and Vegetation Analysis: An application for a permit subject to the requirements of Section 2-2-414 shall contain an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the new or modified source and the general commercial, residential, industrial and other growth associated with the source or modification. The applicant need not provide an analysis of the impact on vegetation if it has no significant commercial or recreational value.

2-2-418 PSD Analysis Stack Heights: For the purposes of modeling, stack heights beyond what is required by good engineering practices shall not be allowed. This requirement should not be perceived to be a limit on the actual constructed height of a stack. The method to calculate good engineering stack height is referenced in Section 2-2-602.

2-2-419 Permit Conditions: The APCO may require any permit condition necessary to insure compliance with this Rule to be included in an authority to construct or permit to operate. This may include conditions controlling the operation of the source, of its abatement equipment, or of sources used to provide mitigation (offsets). Conditions may have a future effective date and may be made conditional on the results of source tests, ground level monitors or public complaints.

419.1 All emission reduction credits shall be enforceable by permit conditions; such permit conditions shall constitute applicable requirements of the State Implementation Plan for purposes of Section 113 and 304 of the Clean Air Act and are enforceable in the same manner as other SIP requirements.

(Amended June 15, 1994)

2-2-420 Deleted March 1, 2000

(October 20, 1999)

2-2-421 Offset Deferral, Annual Permit Renewal: Whenever offsets are required by Section 2-2-302 or 303, a person has the option to defer providing the offsets until the time of the annual permit renewal provided:

421.1 The facility demonstrates that they have valid Banking Certificates adequate to cover their offset obligation. Offsets deferred under the provisions of this Section shall be provided by the facility at least 30 days prior to the date of annual permit renewal, and

421.2 The facility does not have a cumulative increase greater than 15 tons per year for the pollutant or pollutants subject to the offset requirement(s).

(Adopted June 15, 1994)

2-2-422 Offset Refunds: Whenever an authorized source is either not constructed or is constructed and operated to result in lower emissions than the amount authorized, the APCO shall issue a certificate refunding the excess offsets. The APCO shall add appropriate conditions to the operating permits to make the new emission levels enforceable.

(Adopted October 7, 1998)

2-2-423 Demonstration of Offset Program Equivalence: By March 1 of each year, the District shall submit to EPA a demonstration that offsets provided for all new and modified sources within the District, less adjustments to those offsets for federal purposes occurring between credit generation and use, exceed federal offset requirements for new major sources or major modifications at major stationary sources. Adjustment to emission reductions for federal purposes will be required if any of the following occur between the time the credit is generated and the time the credit is used:

423.1 BAAQMD adopts a relevant measure or rule that is required for purposes of federal attainment demonstration requirements.

423.2 A relevant rule or measure is approved into the State Implementation Plan applicable in the BAAQMD;

423.3 EPA promulgates a relevant final rulemaking for either a New Source Performance Standard or a Maximum Achievable Control Technology Standard.

The demonstration shall include:

423.4 Emission increases represented by all authorities to construct new major facilities and major modifications at major facilities issued during the three calendar years preceding the demonstration date;

423.5 A list of all emission reductions used to offset those emission increases;

423.6 The emission baselines that were used to calculate the emission reduction;

423.7 The source type, size and category that had generated the emission reduction credit;

423.8 All relevant rules that have been adopted or promulgated since the emission reduction had occurred.

423.9 Adjustments to emission reduction for federal purposes for all affected projects.

423.10 All of the above for as many non-major projects as are needed to demonstrate equivalence.

If the analysis fails to make the required demonstration, the District shall provide sufficient offsets to make up the difference out of the small facility bank. If the small facility bank does not contain the necessary surplus emission reductions, the District shall obtain the necessary surplus emission reductions. (Adopted May 17, 2000)

2-2-500 MONITORING AND RECORDS

2-2-501 PSD Pre-Construction Ambient Air Monitoring: An applicant subject to the requirements of subsection 2-2-414.3 shall meet the following requirements:

501.1 Prior to commencing pre-construction ambient air monitoring, receive written approval from the APCO regarding the selection and operation of monitoring stations.

501.2 Operate the monitoring stations in accordance with the provisions of Appendix B to 40 CFR 58. The APCO may approve the use of District air monitoring data as part of the PSD air quality analysis required by Section 2-2-414.

2-2-502 PSD Post-Construction Monitoring: The owner or operator of a facility subject to the requirements of Section 2-2-414 shall, after construction of the facility or modification, conduct such ambient air quality monitoring as the APCO specifies in the authority to construct or the permit to operate. The monitoring shall determine the effect emissions from the facility or modification may have, or are having, on air

quality in the area. All air monitoring shall be performed in accordance to the Manual of Procedures, Volume VI and 40 CFR Appendix B.

2-2-600 MANUAL OF PROCEDURES

2-2-601 Ambient Air Quality Monitoring: Any person subject to the ambient air quality monitoring requirements of this Rule shall use the methods prescribed in the Manual of Procedures, Volume VI.

2-2-602 Good Engineering Practice (GEP) Stack Height: The method for calculating GEP stack height is contained in the FEDERAL REGISTER: Volume 50, Number 130; Monday, July 18, 1985.

2-2-603 PSD Air Quality Evaluation Procedure: As a guideline to preparing an air quality impact analysis the applicant is encouraged to review "Guidelines for Air Quality Maintenance Planning and Analysis," Volume 10 (Revised): Procedures for Evaluating Air Quality Impact of New Stationary Sources, EPA-450/4-77-001.

2-2-604 Emission Increase Calculation Procedures, New or Modified Sources: The APCO shall determine the annual emission increase, expressed as tons per year, from:

604.1 A new source based on the maximum emitting potential of the new source or the maximum permitted emission level of the new source, approved by the APCO, subject to federally enforceable limiting conditions.

604.2 A modified source by subtracting either the baseline annual emission rate, as calculated using the methodology in Section 2-2-605, from the new maximum permitted emission level of the modified source, approved by the APCO, subject to federally enforceable limiting conditions.

(Amended 6/15/94; 5/17/00)

2-2-605 Emission Calculation Procedures, Emission Reduction Credits: The following methodology shall be used to calculate emission reduction credits.

605.1 The baseline period consists of the 3 year period immediately preceding the date that the application is complete (or shorter period if the source is less than 3 years old). The applicant must have sufficient verifiable records of the source's operation to substantiate the emission rate and throughput during the entire baseline period.

605.2 Baseline throughput is the lesser of:

2.1 actual average throughput during the baseline period; or

2.2 average permitted throughput during the baseline period, if limited by permit condition.

605.3 Baseline emission rate, expressed in the units of mass of emissions per unit of throughput, is the average actual emission rate during the baseline period. Periods where the actual emission rate exceeded regulatory or permitted limits shall be excluded from the average.

605.4 Baseline Throughput and Emission Rate - Fully Offset Source: For a source which has, contained in a permit condition, an emission cap or emission rate which has been fully offset by the facility (without using emission reductions from the Small Facility Banking Account), the baseline throughput and baseline emission rate shall be based on the levels allowed by the permit condition.

605.5 The adjusted baseline emission rate shall be determined by adjusting the baseline emission rate downward, if necessary, to comply with the most stringent of RACT, BARCT, and District rules and regulations in effect or contained in the most recently adopted Clean Air Plan.

605.6 Emission reduction credits shall be the difference between the adjusted baseline emission rate times the baseline throughput, and the emission cap or emission rate accepted by the applicant as a federally enforceable limiting conditions.

(Amended 6/15/94; 5/17/00)

2-2-606 Emission Calculation Procedures, Offsets: Except as provided by the offset deferral provision of Section 2-2-421, before the APCO may issue an authority to construct for a new or modified source, offsets shall be provided, as required by Sections 2-2-302, 303 or 313 by the applicant from credits in the District's Emissions

Bank and/or from contemporaneous emission reduction credits which qualify in accordance with Sections 2-2-201 and 605, or by the District from the small facility banking account for the amounts calculated as follows:

606.1 For precursor organic compounds (POC) and nitrogen oxides (NO_x) for the total of all emission increases as determined in Section 2-2-604 plus any pre-existing cumulative increase from April 5, 1991, multiplied by the offset ratio required by Section 2-2-302.

606.2 If required by Section 2-2-303, for, PM₁₀, and sulfur dioxide for the total of all emission increases as determined in Section 2-2-604 multiplied by the appropriate offset ratio specified in Section 2-2-303.

Emission offsets provided in excess of those required, which meet the requirements of a bankable reduction per Regulation 2-4, may be banked. Banking fees shall be waived for this transaction. (Amended 6/15/94; 5/17/00)

2-2-607 Emission Calculation Procedures, Emission Reduction Credits for Mobile Sources: Emission reduction credits for mobile sources shall be determined by the Mobile Source Emission Reduction Credits procedures published February 1994 (or subsequent revisions) by the California Air Resources Board or other District approved procedures in the Manual of Procedures. (Adopted June 15, 1994)

2-2-608 Deleted May 17, 2000

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REGULATION 2

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RULE 3

POWER PLANTS

2-3-100 GENERAL

- 2-3-101 Description:** This Rule contains special provisions relating to the procedures for the review and standards for the approval of authorities to construct power plants within the District, for which a Notice of Intention (NOI) or Application for Certification (AFC) has been accepted by the California Energy Commission (Commission).

2-3-200 DEFINITIONS

- 2-3-201 Determination of Compliance:** A decision by the APCO, made following a review of applicable data, conducted in a manner that is identical to the review conducted to establish the eligibility of a person to receive an authority to construct a stationary source subject to Rule 2 of this Regulation.

2-3-300 STANDARDS

- 2-3-301 Authority to Construct a Power Plant:** An authority to construct a power plant shall be issued only upon the issuance by the APCO of a Determination of Compliance, and the submittal of the Determination of Compliance to the Commission.
- 2-3-302 Permit to Operate a Power Plant:** The APCO shall issue a permit to operate a power plant if the applicant has received certification pursuant to an AFC and, after construction, the power plant is in compliance with all conditions of the certificate and the authority to construct.

2-3-400 ADMINISTRATIVE REQUIREMENTS

- 2-3-401 NOI Proceedings:** Within 14 days of receipt of a NOI, the APCO shall notify the ARB and the Commission of the District's intention to participate in the NOI proceedings. If the District chooses to participate in the NOI proceedings, the APCO shall prepare and submit a report to the ARB and the Commission prior to the conclusion of the nonadjudicatory hearings specified in Section 25509.5 of the Public Resources Code. That report shall include, at a minimum:
- 401.1 A preliminary specific definition of BACT for the proposed power plant.
 - 401.2 A preliminary discussion of whether there is substantial likelihood that the requirements of District Regulations can be satisfied by the proposed power plant.
 - 401.3 A preliminary list of conditions which the proposed power plant must meet in order to comply with District regulations.

- 2-3-402 AFC Proceedings:** Upon receipt of an AFC, the APCO shall determine whether the information contained therein is sufficient to undertake a Determination of Compliance review. If not, the APCO shall, within 20 days of receipt of the AFC, so inform the Commission, and the AFC shall be considered incomplete and returned to the applicant for resubmittal. The APCO may also request from the applicant any information necessary for the completion of the Determination of Compliance review. If the information is not supplied, the APCO may petition the presiding Commissioner for an order directing the applicant to provide such information.
- 2-3-403 Preliminary Decision:** Within 180 days of accepting an AFC as complete, the APCO shall conduct a Determination of Compliance review and make a preliminary decision as to whether the proposed power plant meets the requirements of District regulations. If so, the APCO shall make a preliminary determination of conditions to be included in the Certificate, including specific BACT requirements and a description of mitigation measures to be required.
- 2-3-404 Public Notice, Comment and Public Inspection:** The preliminary decision made pursuant to Section 2-3-403 shall be subject to the public notice, public comment and public inspection requirements contained in Section 2-2-406 and 407 of Rule 2.
- 2-3-405 Determination of Compliance, Issuance:** Within 240 days of the acceptance of the AFC as complete, the APCO shall issue and submit to the commission a Determination of Compliance. If the Determination of Compliance cannot be issued, the APCO shall so advise the Commission. When the AFC is approved by the Commission, the APCO shall ascertain whether the Certificate contains all applicable conditions. If so, the APCO shall grant an authority to construct.

**REGULATION 2
PERMITS
RULE 4
EMISSIONS BANKING**

(Adopted March 7, 1984)

2-4-100 GENERAL

2-4-101 Banking: The banking of emission reduction credits is intended to provide a mechanism for sources to obtain offsets under the New Source Review regulations contained in Regulation 2, Rule 2 of the District and is not intended to recognize any pre-existing vested right to emit air pollutants. (Amended June 15, 1994)

2-4-200 DEFINITIONS

2-4-201 Emission Reduction Credit: As defined in Section 2-2-201.
(Amended 7/17/91; 6/15/94; 10/7/98)

2-4-202 Deleted May 17, 2000

2-4-203 Bankable Pollutants: Emission reduction credits of the following pollutants may be deposited in the emissions bank: precursor organic compounds, non-precursor organic compounds, particulate matter, PM₁₀, sulfur dioxide, nitrogen oxides, and carbon monoxide. (Amended 7/17/91; 6/15/94)

2-4-204 Reasonably Available Control Technology: As defined in Regulation 2-1-209.
(Amended July 17, 1991)

2-4-300 STANDARDS

2-4-301 Bankable Reductions: All emission reduction credits as defined in Section 2-4-201 not prohibited by Section 2-4-303 are bankable. The APCO may include a condition in an authority to construct involving reductions pursuant to subsections 2-4-301.1, 301.2, or 301.5, stating that the emission reduction shall be eligible for banking after being demonstrated by source test or other means acceptable to the APCO, including emission factors. Any regulatory change adopted 90 or more days after a complete application for an authority to construct shall not affect the potential for bank deposits resulting from reductions at sources covered by that authority to construct. The following are examples of bankable reductions:

- 301.1 Emission reduction credits resulting from the installation of a level of control greater than required by regulation are bankable, including installation of BACT where BACT is not required.
- 301.2 Emission reduction credits due to the installation of different processes or equipment which emit less than the previous process or equipment that performed the same function.
- 301.3 Emission reduction credits due to the effective operation and maintenance of abatement equipment if the applicant accepts a condition on the permit specifying a lower level of emissions than otherwise required by District regulations.
- 301.4 Emission reduction credits resulting from switching to a fuel which results in less emissions, provided the applicant agrees to a condition on the appropriate permit specifying the fuel to be used in the future.
- 301.5 Emission reduction credits of fugitive emissions if the reductions are quantified by source tests or other methods approved by the APCO.
- 301.6 Other emission reduction credits, such as 1) limitations on the type or quantity of fuel burned, 2) solvent recovery projects, and 3) limitations on throughput.
- 301.7 Emission reduction credits which would result from changes to specific limiting conditions in an authority to construct or permit to operate issued since March 7, 1979, provided that the emissions associated with those

limiting conditions have been offset pursuant to the requirements of Regulations 2-2-302 or 303.

- 301.8 Emission reduction credits resulting from mobile source reductions calculated in accordance with the procedures of Regulation 2-2-607.

(Amended 7/17/91; 6/15/94)

2-4-302 Bankable Reductions for Closures: Emission reduction credits not prohibited by Section 2-4-303 are bankable. The following restrictions apply:

- 302.1 Closure of sources, where the reduction is permanent at the source, but it is unclear whether the reduction will be replaced by an emissions increase elsewhere within the District, are bankable only if the applicant accepts a condition restricting use of the deposits to offsetting emission increases in the same or closely related industries. For example, the closure of public utility power generation facilities could be bankable if use is restricted to offsetting emission increases from other power generation facilities (including resource recovery and cogeneration facilities). Closure of petroleum or petroleum product storage tanks at refineries could be bankable if use is restricted to offsetting emission increases at other petroleum or petroleum products storage tanks, or to offset emission increases at the associated refinery.
- 302.2 Issuance of a Banking Certificate for emission reductions resulting from a closure cancels the permit to operate. The reduction shall be enforceable through a condition in the Banking Certificate and through enforcement of Regulation 2-1-302 pertaining to operating without a permit.
- 302.3 The permanency of closures shall be demonstrated through removal of the source from the District, rendering it inoperative, destruction of the source, or by inclusion of appropriate conditions in the Banking Certificate providing for automatic cancellation of the Banking Certificate if emissions resume and replacement by the applicant of the emission reduction credit if the deposit has been transferred or withdrawn. (Amended 7/17/91; 6/15/94; 5/17/00)

2-4-303 Limitations on Deposits: The following cannot be banked:

- 303.1 Emission reduction credits achieved during periods in which a moratorium on banking deposits is in effect pursuant to Section 2-4-410. After removal of the moratorium, they may subsequently be banked. The period of the moratorium shall not be considered "normal operation" for the purpose of determining the bankable emissions.
- 303.2 Emission reductions from closure of sources where the demand for the services or product would merely shift to other sources in the District, with little or no decrease in emissions basin-wide.
- 2.1 The APCO may, at his or her discretion, require submittal of data to document that reductions from the closure of such types of operations will not result in such a shift, and could therefore be banked.
- 2.2 Only the net reduction (if any) shall be banked for shutdowns of manufacturing operations where the operation is being transferred elsewhere within the same stationary source or to a different stationary source owned by the applicant within the District.
- 303.3 Emission reductions due to the shutdown or closure of sources or the installation of controls on sources excluded from District regulations pursuant to Regulation 1-110 or exempt from permit requirements pursuant to Regulation 2-1.
- 303.4 Transfer of ownership of an emission source if the source remains operable and within the District.
- 303.5 Emission reductions at facilities belonging to companies which have received unreimbursed offsets from the Small Facility Emissions Bank. Once these offsets have been reimbursed, the remaining emission reductions may be banked. (Amended 7/17/91; 6/15/94; 10/7/98; 5/17/00)

2-4-304 Limitations on Use of Deposits: Emission reduction credits may not be used to:

- 304.1 Exempt a source from Best Available Control Technology (BACT) requirements contained in subsections 2-2-301.1 and 301.2 of Regulation 2.
- 304.2 Exempt a source from emission limitations established in Regulation 10 (New Source Performance Standards).

304.3 Exempt a source from any other air pollution control requirements whatsoever of Federal, State, or District laws, rules and regulations.

(Amended 7/17/91; 6/15/94)

2-4-305 Use of Withdrawals: Bank deposits may be withdrawn by the depositor or by any other person to whom they have been transferred by the depositor for use in meeting the requirements to obtain offsets specified in Rule 2 of this Regulation.

(Amended July 17, 1991)

2-4-400 ADMINISTRATIVE REQUIREMENTS

2-4-401 Banking Application: An application to deposit an emission reduction in the emissions bank shall be submitted on forms specified by the APCO. No banking application shall be accepted from a stationary source for pollutants which are the subject of a variance, abatement order or other similar formal order, until compliance with the emission limitations which are the subject of the variance or order is achieved.

2-4-402 Complete Banking Application: The APCO shall determine whether a banking application is complete not later than 30 calendar days following receipt of the application, or after a longer time period agreed upon in writing by both the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the information that is required. The applicant shall have 90 days to submit the requested information. Upon receipt of all requested information, a new 30 day period to determine completeness shall be initiated. If, at the end of 90 days, no data is submitted or the application is still incomplete, the APCO may cancel the banking application with written notification to the applicant. Upon a determination that the application is complete, the APCO shall notify the applicant in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application, may be requested. Withdrawal of a banking application by an applicant shall result in cancellation of the application; any re-submittal may be evaluated using a new application completion date.

(Amended 7/17/91; 6/15/94; 5/17/00)

2-4-403 Preliminary Decision: Within 60 days following the acceptance of a banking application as complete, which is not subject to the publication, public comment and inspection requirements of Section 2-4-405, or, with the consent of the applicant, such longer period as may be agreed upon, the APCO shall make a preliminary decision and notify the applicant in writing as to whether the APCO intends to approve, conditionally approve, or deny the application.

(Amended July 17, 1991)

2-4-404 Preliminary Decision, Major Deposits: Within 90 days following the acceptance of a banking application as complete, which is subject to the publication, public comment and inspection requirements of Section 2-4-405, or, with the consent of the applicant, such longer period as may be agreed upon, the APCO shall make a preliminary decision and notify the applicant in writing as to whether the APCO intends to approve, conditionally approve, or deny the application.

(Adopted July 17, 1991)

2-4-405 Publication, Public Comment and Inspection: Before approving the banking of any emission reduction in excess of 40 tons per year of any pollutant or before declaring a moratorium on further banking of emission reductions, the APCO shall cause to be published in at least one newspaper of general circulation within the District, and be sent to any individual submitting a written request to the APCO for notification, a notice stating the preliminary decision of the APCO to approve the banking of emission reductions or to declare a moratorium on further banking of emission reductions and inviting written public comment. The APCO shall make available for public inspection at District headquarters the information submitted by the applicant, the APCO's analysis, and the preliminary decision to grant or deny the banking application, including the reason therefore and any proposed conditions. The confidentiality of trade secrets shall be considered in accordance with Section 6254.7 of the Government Code. Such information shall also be transmitted to adjacent air pollution control districts, the California Air Resources Board, and the U.S. EPA.

(Renumbered, Amended July 17, 1991)

- 2-4-406 Public Meeting:** During the 30-day period following the date of publication, which may be extended by the APCO, the APCO may, based on the receipt of written comments, elect to hold a public meeting to receive oral and written comments from the public. After considering all such comments, the APCO shall, within 30 days of the close of the comment period, make a final decision concerning such banking.
(Renumbered July 17, 1991)
- 2-4-407 Banking Certificate:** The APCO shall issue a banking certificate within 30 days of the issuance of the preliminary decision for an approved deposit not subject to Section 2-4-405, or within 30 days of the close of the public comment period if the banking application is approved. The certificate shall identify the owner of the certificate, the quantity of the emission reduction credits of each pollutant for deposit in the emissions bank in tons per year, the location of the facility at which the reduction was created, any conditions on use of the emission reduction credits, and any other data deemed appropriate by the APCO.
(Renumbered, Amended 7/17/91; Amended 6/15/94)
- 2-4-408 Appeal to the Hearing Board, Banking:** Any person dissatisfied with the decision of the APCO regarding the approval or disapproval of an application for banking air contaminants may appeal that decision within 30 calendar days in accordance with the provisions of Regulation 2-1-410.
(Renumbered, Amended 7/17/91; Amended 5/17/00)
- 2-4-409 Protection and Duration of Deposits:** Deposits are permanent until used by the depositor or any party to whom the depositor has transferred the deposit. Changes in offset ratios shall not apply to emission reduction credits already used. After issuance of the Banking Certificate confirming the deposit, subsequent changes in regulations to require the type of reduction banked shall not reduce or eliminate the deposit.
(Renumbered 7/17/91; Amended 6/15/94)
- 2-4-410 Moratorium on Banked Emissions:** If the APCO determines that additional mandatory emission reductions will be necessary to attain an ambient air quality standard, the APCO may declare a full or partial moratorium on banking deposits of the applicable air contaminant, after opportunity for public comment as provided in Sections 2-4-405 and 406. Such a moratorium shall be lifted after the APCO determines that the Bay Area Air Quality Plan demonstrates attainment of such standards.
(Renumbered, Amended July 17, 1991)
- 2-4-411 Banking Register:** The District shall maintain a "banking register", which shall consist of a record of all deposits, deposit applications, withdrawals, and transactions. A summary of the data in the banking register shall be available to the public upon request and the District emission inventory shall explicitly include all outstanding deposits appearing in the summary as current existing emissions.
(Renumbered, Amended July 17, 1991)
- 2-4-412 Withdrawal Procedures for Deposits:** The following are procedures to be used for the withdrawal of banked emission reduction credits:
- 412.1 Deposits shall be withdrawn in accordance with the offset ratios in effect at the time of withdrawal as specified in Regulations 2-2-302 and 303.
 - 412.2 The owner of record shown in the District's banking register shall surrender the Banking Certificate in order to withdraw the banked emission reduction credit. If the entire deposit is used, the District shall retain the Certificate; if the deposit is partially used, the District shall retain the old Certificate and issue a new Certificate identifying the remaining portion of the deposit.
 - 412.3 If the deposit is transferred for later use, the owner of record shall submit the old Certificate signed by the owner of record and by the new owner; the District shall retain the old Certificate, issue a new Certificate in the name of the new owner for the amount transferred, and issue a new Certificate to the existing owner for any portion not transferred.
 - 412.4 If the deposit is transferred for use in an application for an authority to construct which requires offsets, the owner of record shall submit the old Certificate signed by the owner of record and by the new owner; the District shall retain the old Certificate, issue a new Certificate to the owner of record for any portion of the deposit not transferred, and identify use of the deposit in

the authority to construct issued to the user of the deposit. No Certificate shall be issued to the user.

- 412.5 For any transferred deposit, the creator of the deposit shall continue to have enforceable conditions in the appropriate permits to operate to assure permanency of the emission reduction and shall be held liable for compliance with those conditions; the user of any transferred bank deposit shall not be held liable for any failure of the creator to comply with District requirements.

(Renumbered, Amended 7/17/91; Amended 6/15/94)

- 2-4-413 Annual Report, Banking:** The APCO shall provide an annual report to the Board of Directors on all banking transactions which have occurred during the preceding year.

(Renumbered July 17, 1991)

- 2-4-414 Small Facility Banking Account:** The APCO may establish a small facility banking account and grant offsets. The APCO may fund the Small Facility Banking Account by deposit of unclaimed emission reductions resulting from source or facility closures, and by a small facility growth allowance established in the Clean Air Plan adopted by the District. In no event, may the APCO grant offsets in an amount that exceeds the amount contained in the Small Facility Banking Account. The APCO may provide POC or NOx offsets, where required by Regulation 2-2-302, to small facilities which emit or will emit less than 50 tons per year of POC or NOx. Allocation of credits shall conform to the requirements of Section 40919(a)(2) of the Health and Safety Code. If an applicant holds banked emission reduction credits, those credits must be used as a source of offsets prior to the APCO approving offsets from the small facility banking account (this includes bankable emission reduction credits held by other District facilities owned by the applicant). For the purposes of determining the amount of offsets granted by the APCO, any banked emission reduction credits that have been sold during the three years preceding a complete permit application shall be considered to be held by the applicant. Allocations from the small facility banking account cannot be transferred or banked by the recipient.

(Adopted 7/17/91; Amended 6/15/94; 10/7/98; 5/17/00)

- 2-4-415 Military Base Closure Banking Account:** The APCO shall establish a banking account for each military facility or base subject to termination of military operations. The APCO shall, in accordance with the provisions of this rule, bank the emission reduction credits for each military facility or base. The designated base reuse commission shall be entitled to the use of the banked emission reduction credits for projects within the jurisdiction of the base reuse commission, provided that the emission reduction credits have not been banked by the military facility or base.

(Adopted June 15, 1994)

2-4-600 MANUAL OF PROCEDURES

- 2-4-601 Emission Calculation Procedures:** The emission calculation procedures contained in Regulation 2-2-600 shall be applicable to this Rule. (Amended July 17, 1991)

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
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**REGULATION 2
PERMITS
RULE 6
MAJOR FACILITY REVIEW**

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**REGULATION 2
PERMITS
RULE 6
MAJOR FACILITY REVIEW**

(Adopted November 3, 1993)

2-6-100 GENERAL

2-6-101 Description: The purpose of this rule is to implement the operating permit requirements of Title V of the federal Clean Air Act as amended in 1990. This rule shall apply to major facilities, Phase II acid rain facilities, subject solid waste incinerator facilities and any facility in a source category designated by the Administrator of the EPA in a rulemaking as requiring a Title V permit. This rule also provides a means by which facilities may avoid the Title V or other requirements by limiting their potential to emit. This rule shall not alter any other requirements of applicable federal, state, or District orders, rules or regulations, except for monitoring, recordkeeping, and reporting requirements that are subsumed using the permit shield. (Amended 10/20/99, 5/2/01)

2-6-110 Exemption, Asbestos: Any demolition or renovation of an asbestos-containing source that requires a permit solely because it is subject to Regulation 11, Rule 2, Asbestos Demolition, Renovation, and Manufacturing, is exempt from this regulation.

2-6-111 Exemption, Wood Heaters: Any wood heater that requires a permit solely because it is subject to Regulation 10, Subpart AAA, is exempt from this regulation.

2-6-112 Exemption, Motor Vehicles: Engines used to propel motor vehicles, as defined in the California Vehicle Code, are exempt from this regulation.

2-6-113 Exemption, Registered Portable Engines: Portable internal combustion engines, except gas turbines, that are registered in accordance with Health and Safety Code Section 41753 are exempt from this regulation.

(Adopted 10/20/99; Amended 4/16/03)

2-6-114 Exemption, Non-Road Engines: Engines as defined by 40 CFR Part 89 are exempt from this regulation. (Adopted 10/20/99)

2-6-200 DEFINITIONS

2-6-201 Administrative Permit Amendment: A non-substantive amendment to a major facility review permit. The following amendments are administrative amendments: changes in recordkeeping format that are not relaxations of applicable requirements, the correction of typographical errors, changes in permit format that are not alterations of applicable requirements, changes in source descriptions that are not alterations of applicable requirements, changes in the descriptions of applicable requirements that add detail but do not affect substantive requirements, deletion of requirements containing sunset dates that have passed, the identification of administrative changes at a facility (such as a replacement of the facility's responsible official or a change in ownership or operational control of the facility which involves no physical or operational changes to the facility), the deletion of sources, the approval of a District rule into the SIP, the imposition of more frequent emission monitoring requirements, and changes to applicable requirements and related monitoring that are not federally enforceable.

(Amended 10/20/99, 4/16/03)

2-6-202 Applicable Requirements: Air quality requirements with which a facility must comply pursuant to the District's regulations, codes of California statutory law, and the federal Clean Air Act, including all applicable requirements as defined in 40 CFR 70.2.

(Amended 10/20/99, 5/2/01)

2-6-203 Clean Air Act: The federal Clean Air Act, as amended in 1990, including the implementing regulations.

- 2-6-204 Designated Facility:** Any facility, other than a major facility, phase II acid rain facility, or subject solid waste incinerator facility, as defined by this rule, that falls within a source category designated as subject to the requirements of Title V of the federal Clean Air Act by the EPA Administrator in a rulemaking. (Amended 10/20/99)
- 2-6-205 Early Reduction Demonstration:** A 90% reduction in hazardous air pollutants or a 95% reduction in particulate hazardous air pollutants achieved pursuant to Section 112(i)(5) of the federal Clean Air Act.
- 2-6-206 Facility:** Any property, building, structure, or installation (or any aggregation of facilities) located on one or more contiguous or adjacent properties and under common ownership or control of the same person that emits or may emit any air pollutant and is considered a single major industrial grouping (identified by the first two-digits of the applicable code in *The Standard Industrial Classification Manual*). In addition, facilities whose operations include cargo loading or unloading from cargo carriers other than motor vehicles shall include the cargo carriers as part of the source that receives or loads the cargo. Accordingly, all emissions from such carriers while operating in the District, or within California Coastal Waters adjacent to the District, shall be included as part of the source emissions.
- 206.1 Notwithstanding the definition in Section 2-6-206 above, the emissions related to cargo carriers will not be included when determining applicability of the requirements of Sections 2-6-301, 307, 310, and 312.
(Amended 10/20/99, 5/2/01)
- 2-6-207 Federally Enforceable:** All limitations and conditions which are enforceable by the Administrator of the U. S. EPA, including requirements developed pursuant to 40 CFR Parts 60 (NSPS), 61 (NESHAPS), 63 (HAP), 70 (State Operating Permit Programs), and 72 (Permits Regulation, Acid Rain), requirements contained in the State Implementation Plan (SIP) that are applicable to sources located in the District, any District permit requirements established pursuant to 40 CFR 52.21 (PSD) or District regulations approved pursuant to 40 CFR Part 51, Subpart I (NSR), and any operating permits issued under an EPA-approved program that is a part of the SIP and expressly requires adherence to any permit issued under such program.
(Amended 10/20/99, 5/2/01)
- 2-6-208 Fossil Fuel:** Natural gas, petroleum, and coal, or any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.
- 2-6-209 Fugitive Emissions:** All emissions from unintended openings in process equipment, emissions occurring from miscellaneous activities relating to the operation of a facility, and emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- 2-6-210 Hazardous Air Pollutant:** Any pollutant that is listed pursuant to Section 112(b) of the Clean Air Act.
- 2-6-211 Independent Power-Production Facility:** A facility that generates electricity and fulfills the following conditions:
- 211.1 The facility must be nonrecourse project-financed as defined in 10 CFR 715;
 - 211.2 The facility must sell 80 percent or more of its electrical output at wholesale;
 - 211.3 Direct public utility ownership of the equipment must not exceed 50 percent; and
 - 211.4 Deleted 5/2/01
 - 211.5 The facility must be required to hold allowances under Title IV of the Clean Air Act.
(Amended 5/2/01)
- 2-6-212 Major Facility:** For the purposes of Regulation 2, Rule 6, a major facility is either of the following:
- 212.1 Major Facility (Regulated Air Pollutants): A facility that has the potential to emit 100 tons per year or more of any regulated air pollutant except total suspended particulate. For fugitive emissions of regulated air pollutants, only the fugitive emissions from facility categories listed in 40 CFR 70.2 "Definitions - Major source (2)" shall be included in determining whether the facility is a major facility. Once any facility is determined to be a major facility, all fugitive emissions from the facility shall be included in calculating the facility's emissions.

- 212.2 Major Facility (Hazardous Air Pollutants): A facility that has the potential to emit 10 tons per year or more of a single hazardous air pollutant, 25 tons per year or more of a combination of hazardous air pollutants, or such lesser quantity as the EPA Administrator may establish by rule. All fugitive emissions of hazardous air pollutants are included in determining a facility's potential to emit. For radionuclides, the definition of a major facility shall be specified by the EPA Administrator by rule.
- 212.3 A facility with permit conditions that limit emissions to a level that is greater than the above thresholds is defined as a major facility.
(Amended 10/20/99)
- 2-6-213 Major Facility Review (MFR):** Plantwide review of sources, emissions, and regulatory requirements at facilities including, but not limited to, major facilities, phase II acid rain facilities, subject solid waste incinerator facilities, and designated facilities, which are potentially subject to the permitting requirements of Regulation 2, Rule 6, and of Title V of the Clean Air Act.
- 2-6-214 Major Facility Review Permit:** An operating permit issued to a major facility, phase II acid rain facility, subject solid waste incinerator facility, or designated facility, pursuant to the requirements of this rule.
- 2-6-215 Minor Permit Revision:** Any revision to a federally enforceable condition on a major facility review permit which:
- 215.1 is not a significant permit revision; and
- 215.2 is not an administrative permit amendment.
- 215.3 Deleted 10/20/99
(Amended 10/20/99)
- 2-6-216 Operating Scenarios:** All modes of facility operation to be permitted, including normal operating conditions, start-up, and shutdown. This shall include all planned or reasonably foreseeable process, feed, and product changes. Operating scenarios must meet all applicable requirements.
- 2-6-217 Phase II Acid Rain Facility:** A facility that includes fossil-fueled combustion equipment that is used to generate electricity for sale, or is otherwise subject to 40 CFR 72, except for the following equipment:
- 217.1 A fossil-fueled combustion device built before November 15, 1990, and that did not, as of November 15, 1990, and does not currently, serve a generator with a nameplate capacity of greater than 25 MW;
- 217.2 A cogeneration facility with a fossil-fueled combustion device that sells less than 219,000 MW-hrs annually or less than one-third of its potential electric output capacity to any utility power distribution system;
- 217.3 A solid waste incinerator that burns fossil fuels for less than 20 percent (on a BTU basis) of the total energy input during any calendar year; or
- 217.4 A qualifying facility or an independent power production facility that meets both of the following conditions:
- 4.1 Possession as of November 15, 1990 of qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and
- 4.2 The net output capacity of the equipment cannot exceed 130 percent of the planned net output capacity.
- 217.5 Simple combustion turbines that commenced operation before November 15, 1990;
- 217.6 A fossil-fueled combustion device that, during 1985, and as of November 15, 1990, and currently, does not serve a generator that produced or produces electricity for sale; and
- 217.7 A fossil-fueled combustion device that commenced commercial operation on or after November 15, 1990, and serves a generator with a capacity not greater than 25 MW, burns fuel with a sulfur content that is less than 0.05 percent, and that complies with the requirements of 40 CFR 72.7.
- 217.8 A fossil-fueled combustion device that supplies only incidental electricity for sale and that complies with the requirements of 40 CFR 72.14.
- 217.9 A fossil-fueled combustion device that is permanently retired and that complies with the requirements of 40 CFR 72.8.
(Amended 5/2/01)

- 2-6-218 Potential to Emit:** The maximum capacity of a facility to emit a pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the facility to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as a part of its design only if the limitation, or the effect it would have on emissions, is federally enforceable or legally and practicably enforceable by the District. A facility that exceeds an enforceable limitation is considered to have a potential to emit that is unconstrained by any such exceeded limit. (Amended 10/20/99, 4/16/03)
- 2-6-219 Preconstruction Permit or Review:** A review of construction plans prior to construction, including:
- 219.1 District evaluation of an application for an authority to construct issued pursuant to District Regulation 2, Rule 1;
 - 219.2 District evaluation of an application for an authority to construct issued pursuant to District Regulation 2, Rule 2;
 - 219.3 A preconstruction review to determine the ability of a proposed source or source modification to comply with applicable New Source Performance Standards pursuant to District Regulation 10;
 - 219.4 A preconstruction review conducted prior to a significant modification to a major facility review permit for a physical or operational change that would be prohibited by an existing federally enforceable condition;
 - 219.5 A preconstruction review conducted prior to a physical or operational change to a synthetic minor facility that would increase the facility's potential to emit to above the threshold for a major facility. Such review must be associated with an application for a major facility review permit for said facility. (Amended 10/20/99)
- 2-6-220 Qualifying Facility:** One of two types of power-generating facilities pursuant to Title 16, Section 796, of the United States Code:
- 220.1 A cogeneration facility that is not owned by a public utility and is certified by the Federal Energy Regulatory Commission as a qualifying facility; or
 - 220.2 A power production facility that is not owned by a public utility, has an output capacity not greater than 80 MW, uses biomass, waste, renewable resources, geothermal resources, solar energy, wind energy, or any combination of the above as its primary energy source, and is certified by the Federal Energy Regulatory Commission as a qualifying facility.
- 2-6-221 Qualifying Power Purchase Agreement:** Defined in 40 CFR 72.2.
- 2-6-222 Regulated Air Pollutant:** For the purposes of this rule, the following air pollutants (as defined in Regulation 1) are regulated:
- 222.1 Nitrogen oxides and volatile organic compounds;
 - 222.2 Any pollutant for which a national ambient air quality standard has been promulgated;
 - 222.3 Any Class I or Class II ozone depleting substance subject to a standard promulgated under Title VI of the Clean Air Act; and
 - 222.4 Any pollutant that is subject to any standard promulgated under Section 111 of the Clean Air Act.
 - 222.5 Any pollutant that is subject to any standard or requirement promulgated under Section 112 of the Clean Air Act including sections 112(g), (j), and (r). (Amended 10/20/99, 5/2/01)
- 2-6-223 Responsible Official:** The responsible official will vary depending upon the type of facility, and shall be designated as follows:
- 223.1 Corporation: The responsible official shall be a president, secretary, treasurer, or vice president in charge of a principal business function or shall otherwise be a duly authorized representative if:
 - 1.1 the representative is responsible for the overall operation of the facility, and
 - 1.2 either the duly authorized representative is responsible for the operation of facilities that employ more than 250 persons or that have gross annual sales or expenditures exceeding \$25 million in 1980

dollars or the APCO has approved a petition from the original responsible official to allow the duly authorized representative to be the responsible official.

- 223.2 Partnership or Sole Proprietorship: general partner or proprietor.
 - 2.1 Partnership of Corporations: The responsible official shall be the responsible official of any of the partner corporations.
- 223.3 Municipality, State, Federal, or Other Public Agency: The principal executive officer or ranking elected official.
- 223.4 Phase II Acid Rain Facilities: The designated representative pursuant to 40 CFR 72.20 through 72.25.
- 2-6-224 **Schedule of Compliance:** Shall have the meaning given to it in 40 C.F.R. Part 70.
(Amended 4/16/03)
- 2-6-225 **Severability Clause:** A statement in a permit issued under this rule that, in the case of a challenge to any part of the permit by EPA, the facility's owner or operator, or any other person, the remaining parts of the permit will remain valid.
- 2-6-226 **Significant Permit Revision:** Any revision to a federally enforceable condition contained in a major facility review permit that can be defined as follows:
 - 226.1 The incorporation of a change considered a major modification under 40 CFR Parts 51 (NSR) or 52 (PSD);
 - 226.2 The incorporation of a change considered a modification under 40 CFR Parts 60 (NSPS), 61 (NESHAPS), or Section 112 of the Clean Air Act (HAP);
 - 226.3 Any significant change or relaxation of any applicable monitoring, reporting or recordkeeping condition;
 - 226.4 The establishment of or change to a permit term or condition allowing a facility to avoid an applicable requirement, including:
 - 4.1 a federally enforceable emission limit assumed in order to avoid classification as a modification under any provision of Title I of the federal Clean Air Act, or
 - 4.2 an alternative hazardous air pollutant emission limit pursuant to Section 112(i)(5) of the Clean Air Act;
 - 226.5 The establishment of or change to a case-by-case determination of any emission limit or other standard;
 - 226.6 The establishment of or change to a facility-specific determination for ambient impacts, visibility analysis, or increment analysis on portable sources; or
 - 226.7 The incorporation of any requirement promulgated by the U. S. EPA under the authority of the Clean Air Act provided that three or more years remain on the permit term.
(Amended 10/20/99)
- 2-6-227 **Simple Combustion Turbine:** Rotary engine driven by a gas under pressure that is created by the combustion of any fuel, including combined cycle engines, and excluding engines with auxiliary firing.
- 2-6-228 **Source:** Any article, machine, equipment, operation, contrivance or related groupings of such that may produce and/or emit any regulated air pollutant or hazardous air pollutant.
- 2-6-229 **Subject Solid Waste Incinerator Facility:** Any source that burns solid waste material (except hazardous waste as defined by RCRA) from commercial, industrial, or general public sources in a category for which a New Source Performance Standard (NSPS) has been adopted after November 15, 1990. (Amended 10/20/99)
- 2-6-230 **Synthetic Minor Facility:** A facility which, by imposition of enforceable permit conditions, has its potential to emit limited to below the threshold levels for a major facility as defined by Section 2-6-212 and is not otherwise required to apply for a major facility review permit under Regulation 2, Rule 6. (Amended 10/20/99)
- 2-6-231 **Synthetic Minor Operating Permit:** A District operating permit that has been modified to include conditions imposing enforceable permit conditions on a facility or source. A synthetic minor operating permit is subject to all the provisions of District Regulations 1, 2, and 3, including, but not limited to, permitting, compliance, and fee requirements.
(Amended 10/20/99)

- 2-6-232 Synthetic Minor Operating Permit Revision:** A revision to a term or condition of a synthetic minor operating permit that establishes a synthetic minor limit or that specifies the monitoring or recordkeeping requirements necessary to verify ongoing compliance with a synthetic minor limit. (Adopted 2/1/95, Amended 10/20/99)
- 2-6-233 Permit Shield:** One of the following:
- 233.1 **Non-applicable Requirements:** A provision in a major facility review permit that identifies and justifies specific federally enforceable regulations and standards which the APCO has confirmed are not applicable to a source or group of sources. Enforcement actions and litigation may not be initiated against the source or group of sources covered by the shield based on those identified regulatory and statutory provisions.
 - 233.2 **Subsumed Requirements:** A provision in a major facility review permit that identifies and justifies specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting which are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits. Enforcement actions and litigation may not be initiated against the source or group of sources covered by the shield based on those identified applicable requirements.
(Adopted 2/1/95; Amended 10/20/99, 5/2/01)
- 2-6-234 Deleted 10/20/99**
- 2-6-235 Actual Emissions:** The emissions of regulated or hazardous air pollutants from a facility for any 12-month period. The basis for determining actual emissions shall be, as appropriate: throughputs of process materials; throughputs of materials stored; usage of materials; data provided in manufacturer's product specifications, material volatile organic compound (VOC) content reports or laboratory analyses; valid continuous emission monitoring data; source test data; other information required by this rule and applicable District, State or Federal regulations; or information requested in writing by the APCO. The effect of abatement devices shall be considered. All calculations of actual emissions shall use District approved methods, including emission factors and assumptions. (Adopted 10/20/99)
- 2-6-236 Modified Source or Facility (for Section 2-6-309):** As defined in Regulation 2-1-234. (Adopted 10/20/99; Amended 5/2/01)
- 2-6-237 Potential to Emit Demonstration:** An analysis showing that a facility does not have a potential to emit at or above the thresholds for a major facility as defined in Section 2-6-212. (Adopted 10/20/99)
- 2-6-238 Process Statement:** A report on permitted sources from an owner or operator of a facility containing one or more of the following, as requested by the APCO: throughputs of process materials; throughputs of materials stored; usage of materials; fuel usage; any available continuous emissions monitoring data; hours of operation; and any other information required by this rule or requested in writing by the APCO.
(Adopted 10/20/99)
- 2-6-239 Significant Source:** A source that has a potential to emit of more than 2 tons per year of any regulated air pollutant, or more than 400 lbs per year of any hazardous air pollutant. (Adopted 10/20/99)
- 2-6-240 State Implementation Plan (SIP):** A state plan to attain or maintain the National Ambient Air Quality Standards pursuant to Section 110 of the Clean Air Act that has been approved by EPA. (Adopted 10/20/99)
- 2-6-241 12-month Period:** A period of twelve consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month. (Adopted 10/20/99)
- 2-6-242 Affected State:** State whose air quality may be affected by a facility and that is contiguous to the State of California or a state that is within 50 miles of a permitted source within the District. (Adopted 10/20/99; Amended 5/2/01)
- 2-6-243 Final Action:** The issuance, denial, revocation or revision of a permit.
(Adopted 5/2/01)
- 2-6-244 CFR:** Code of Federal Regulations. (Adopted 5/2/01)

2-6-300 STANDARDS

- 2-6-301 Major Facility Review Requirement:** Any major facility as defined in Section 2-6-212 shall undergo major facility review in accordance with the requirements of this rule.
- 2-6-302 Major Facility Review Requirements for Phase II Acid Rain Facilities:** Any Phase II acid rain facility shall undergo major facility review in accordance with the requirements of this rule, even if such facility is not classified as a major facility under Section 2-6-212.
- 302.1 After January 1, 2000, all Phase II acid rain facilities shall comply with the requirements of Sections 405, 406, 408, 409, 411, and 412 of the Clean Air Act. (Amended 10/20/99)
- 2-6-303 Major Facility Review Requirements for Subject Solid Waste Incinerator Facilities:** Any subject solid waste incinerator facility shall undergo major facility review in accordance with the requirements of this rule, even if such facility is not classified as a major facility under Section 2-6-212.
- 303.1 Any relevant Standard of Performance for New Stationary Sources that is adopted by EPA on or after November 15, 1990 shall apply to existing solid waste incinerators as well as to new or modified solid waste incinerators in the District and shall be included in the major facility review permits for such sources. (Amended 10/20/99)
- 2-6-304 Major Facility Review Requirement for Designated Facilities:** Any designated facility shall undergo major facility review in accordance with the requirements of this rule, even if such facility is not classified as a major facility under Section 2-6-212. (Amended 10/20/99)
- 2-6-305 Operational Flexibility:** A facility may make a change to the facility or operation without requiring a major facility review permit revision in accordance with the procedures and restrictions set forth in Section 2-6-417 if the change is not a modification pursuant to Title I of the Clean Air Act and does not exceed any emissions allowable under federally enforceable provisions of the permit. Such change shall in no way affect the obligation of the permittee to comply with any applicable requirement including the requirement to obtain an Authority to Construct under Rule 2-1. This provision shall not apply to the phase II acid rain portion of any facility subject to this Rule. (Amended 2/1/95)
- 2-6-306 Emissions Trading:** The APCO shall allow emissions trading within a facility that has a major facility review permit in accordance with the procedures and restrictions set forth in Section 2-6-418. This provision shall not apply to the phase II acid rain portion of any facility subject to this Rule. (Adopted 5/2/01)
- 2-6-307 Non-compliance, Major Facility Review:** Any facility subject to the requirements of this regulation that is not in compliance with any federally enforceable permit condition, any federally enforceable applicable requirement set forth in its major facility review permit, or the requirement to apply for a major facility review permit is in violation of the Clean Air Act and shall be subject to enforcement action, permit termination, permit revocation and reissuance, and/or denial of a permit renewal. Moreover, a facility subject to major facility review which has not submitted a timely and complete permit application by the deadlines set forth in Section 2-6-404 shall not operate. (Amended 2/1/95, 10/20/99)
- 2-6-308 Major Facility Review and Other District Permitting Requirements:** Submittal of a complete application or an administrative permit amendment request in accordance with this rule shall in no way affect, and shall not constitute compliance with, the requirements for authorities to construct and permits to operate as set forth in Regulation 2, Rules 1 and 2.
- 2-6-309 Prohibited Modifications:** A person shall not modify any source or operation covered by a major facility review permit issued under this rule unless such modification is either: (1) included in an operating scenario addressed in the permit;

(2) authorized under this rule; or (3) permitted by the APCO pursuant to an application for a revision to the permit. (Amended 10/20/99)

2-6-310 Synthetic Minor Operating Permit Requirement: Any major facility which elects to accept enforceable permit conditions such that the facility becomes a synthetic minor facility, and is not otherwise subject to major facility review, shall apply for a synthetic minor operating permit. Any facility that files false information with the District in order to obtain a synthetic minor operating permit is in violation of the Clean Air Act and District Regulations and shall be subject to enforcement action. A synthetic minor facility is not subject to the obligations of a major facility unless facility fails to comply with the synthetic minor limits or it becomes a designated facility.

(Amended 10/20/99)

2-6-311 Non-compliance, Synthetic Minor Facilities: Any facility subject to the requirements of a synthetic minor operating permit that is not in compliance with any permit condition set forth in its synthetic minor operating permit shall be subject to enforcement action, permit termination, permit revocation and reissuance, and/or denial of a permit renewal. (Amended 2/1/95, 10/20/99, 5/2/01)

2-6-312 Major Facility Review, Smaller Facilities: Any facility with actual emissions as defined by Section 2-6-235 that exceed any threshold below shall apply for a major facility review permit unless the facility demonstrates that its potential to emit is below the major facility thresholds defined in Section 2-6-212, or the facility has applied for and received a synthetic minor permit.

312.1 25 tons per year of any regulated air pollutant, excluding fugitive emissions per Section 2-6-212;

312.2 2.5 tons of any hazardous air pollutant per year including all fugitive emissions of the hazardous air pollutant;

312.3 6.25 tons of all hazardous air pollutants per year including all fugitive emissions of hazardous air pollutants.

For the purpose of this Section, "actual emissions" shall be the maximum emissions for any consecutive 12-month period ending on or after July 24, 1995.

(Adopted 10/20/99; Amended 5/2/01)

2-6-313 Denial, Failure to Comply: The APCO shall deny a major facility review permit after providing written notification to the applicant, if the facility, or any source therein, is in violation of any applicable requirement and the facility cannot obtain a compliance schedule in accordance with the Health and Safety Code. (Adopted 5/2/01)

2-6-314 Revocation: The APCO may request the Hearing Board to hold a hearing to determine whether a major facility permit should be revoked if it is found that the holder of the permit is violating any provision in the permit or any applicable requirement. (Adopted 5/2/01)

2-6-400 ADMINISTRATIVE REQUIREMENTS

2-6-401 Deleted 10/20/99

2-6-402 Fees: Any facility subject to the requirements of this rule shall pay any applicable fees specified in District Regulation 3, Fees, including Schedule P.

2-6-403 Application for Major Facility Review Permit, Permit Renewal, or Permit Revision: The responsible official for any major facility, phase II acid rain facility, subject solid waste incinerator facility, or designated facility shall apply for a major facility review permit, permit renewal, or permit revision in accordance with all the requirements of this rule. (Amended 2/1/95)

2-6-404 Timely Application for a Major Facility Review Permit: The responsible official for a facility subject to the requirements of Section 403 of Regulation 2, Rule 6, shall submit an application for a major facility review permit to the APCO and to EPA in a timely manner as described below:

404.1 The initial application for a major facility review permit shall be submitted by the applicant within 12 months after the facility becomes subject to Regulation 2, Rule 6.

404.2 An application for a five-year renewal of the terms and conditions of a major facility review permit shall be submitted by the applicant at least 6 months

but no earlier than 12 months prior to the date on which the five-year period for the validity of the terms and conditions of the permit expires.

404.3 An application for a significant permit revision shall be submitted by the applicant prior to commencing an operation associated with a significant permit revision. Where an existing federally enforceable major facility review permit condition would prohibit such change in operation, the responsible official must request preconstruction review and obtain a major facility review permit revision before commencing the change.

404.4 An application for a minor permit revision shall be submitted by the applicant prior to commencing any operation associated with the minor permit revision.

404.5 A phase II acid rain facility shall apply for a major facility review permit in accordance with the deadlines in Section 404.1 of this rule.

404.6 Any major facility subject to Section 112(j) of the federal Clean Air Act must submit an application for a major facility review permit no later than 18 months after the date the U. S. Environmental Protection Agency fails to promulgate any emission standard listed pursuant to Clean Air Act Section 112(c)(1) according to the schedule promulgated under Clean Air Act Section 112(e).

404.7 Deleted 10/20/99

404.8 The initial application for a major facility review permit for a existing major facility with actual emissions lower than 50 tons per year of each regulated air pollutant and 7 tons per year of any hazardous air pollutant shall be submitted by the applicant by October 20, 2000. (Amended 2/1/95; 10/20/99)

2-6-405 Complete Application for a Major Facility Review Permit: All applications for an initial major facility review permit, for a significant revision to an existing major facility review permit, and for a five-year renewal of the terms and conditions of a major facility review permit shall contain the following information in addition to the information required by Regulation 2-1-202:

405.1 All relevant BAAQMD permit application forms;

405.2 A description of the facility's processes and products (by Standard Industrial Classification Code) including any associated with an operating scenario identified by the facility;

405.3 A statement certifying that any fee required by District Regulation 3 has been paid;

405.4 Identification and description of:

4.1 each permitted source at the facility

4.2 each source or other activity that is exempt from the requirement to obtain a permit or excluded from District rules or regulations under Regulation 2, Rule 1, and a citation of the section of the rule under which it is exempted or excluded;

405.5 A list, including citation and description, of all applicable requirements for each source;

405.6 A calculation and summary of annual emissions (including fugitive emissions) of any regulated or hazardous air pollutant from each source or any emission producing activity if the source is a significant source of an air pollutant as defined by Section 2-6-239. Emission calculations and summaries for pollutants emitted below the significance thresholds are not required for such sources or activities that have emissions of other pollutants above these thresholds. The above emission calculations shall also be submitted for any alternate operating scenarios that are submitted with the application;

405.7 A description of the compliance status of the facility with respect to all applicable requirements;

405.8 A compliance statement as follows:

8.1 A statement that the facility will continue to comply with all applicable requirements with which it is currently in compliance;

8.2 A statement that the facility will meet all applicable requirements on a timely basis as requirements become effective during the permit term

and a narrative of how the facility will achieve compliance with all applicable requirements if the facility is not currently doing so; and

8.3 A copy of any schedule of compliance applicable to the facility's operations regarding air quality which has been issued by the District's Hearing Board, the California Air Resources Board, or any court of competent jurisdiction;

405.9 A compliance certification by a responsible official of the facility that the application forms and all accompanying reports and other required compliance certifications are true, accurate, and complete based on information and belief formed after reasonable inquiry; and

405.10 All information required by Volume II of the District's Manual of Procedures.

An application may reference, rather than explicitly list, certain pre-existing information and be considered initially complete. The type of information that may be referenced includes District-issued rules, regulations, permits and published protocols; pollutant emission inventories and supporting calculations; emission monitoring reports, compliance reports and source tests; annual emissions statements; process and abatement equipment lists and descriptions; current operating and pre-construction permit terms; and permit application materials previously submitted. However, the Summary Forms and the Certification of Compliance must be completed in full. Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall submit the supplementary facts or corrected information upon becoming aware of such failure or incorrect submittal. In addition, the applicant must provide additional information as necessary to address any requirements that become applicable. Applications for significant permit revisions shall include the above information only for those sources that will be modified. A copy of all applications and subsequent documents pertaining to the applications shall be sent to EPA by the applicant.

(Amended 4/5/95, 10/20/99, 5/2/01)

2-6-406 Application for a Minor Permit Revision: An application for a minor permit revision to a major facility review permit shall contain:

406.1 A description of the proposed change, the emissions resulting from the proposed change, and any new applicable requirements that will apply if the change occurs;

406.2 A draft permit including the proposed change;

406.3 A request by the responsible official that the minor revision procedures be used;

406.4 A certification by the responsible official that the proposed change is a minor revision as defined in Section 2-6-215; and

406.5 All documents or information required by Section 2-6-405 as they pertain to sources affected by the minor revision.

A facility that has submitted an application for a minor revision may proceed with the revision if the facility complies with the proposed permit terms and conditions. If the facility fails to comply with the proposed terms during the time that the application is being processed, the existing permit terms and conditions may be enforced against it.

(Amended 10/20/99)

2-6-407 Application Shield: A facility shall not be subject to enforcement action for not possessing a major facility review permit if the facility fulfills the following three conditions:

407.1 The facility has filed with the APCO a complete and timely application for an initial major facility review permit or for a five-year renewal of an existing major facility review permit;

407.2 The APCO has not acted on the application; and

407.3 The facility has honored all requests from the APCO for further information relating to the application by the date specified in writing of the request.

If the facility has not submitted a timely and complete application, the period of non-compliance shall be the period between the submittal deadline and the actual submittal.

(Amended 10/20/99)

2-6-408 Completeness Determination: The APCO shall determine whether a major facility review permit application is complete as follows:

- 408.1 Application for an initial permit, for a five-year renewal or for a significant permit revision: The APCO shall determine completeness no later than 60 calendar days following receipt of the application. Unless the APCO requests additional information or otherwise notifies the applicant of incompleteness within 60 days of receipt of the application, the application shall be deemed complete as of the date of receipt.
- 408.2 An application for a minor permit revision: The APCO shall determine completeness within 30 days of receipt of the application. Unless the APCO requests additional information or otherwise notifies the applicant of incompleteness within 30 days of receipt of the application, the application shall be deemed complete as of the date of receipt. The APCO will determine whether the revision qualifies as a minor revision during the 30-day period.
- 408.3 After an application is deemed complete, the APCO may request in writing additional information necessary to evaluate or take final action on the permit. The facility shall have until the date specified in writing to respond to these requests. The APCO may declare a major facility review permit application incomplete if a facility fails to respond to a request for additional information.

(Amended 10/20/99)

2-6-409 Permit Content: A major facility review permit shall contain the following information and provisions:

- 409.1 A listing of all applicable requirements including emission limitations, permit conditions and operational or throughput standards or limits that apply to the facility, and a reference to the origin of each such requirement;
- 409.2 Testing, monitoring, reporting and recordkeeping requirements:
 - 2.1 All applicable requirements for monitoring, recordkeeping and reporting, including applicable test methods and analysis procedures;
 - 2.2 Additional requirements for testing, monitoring, reporting and recordkeeping sufficient to assure compliance with the applicable requirements. Where the applicable requirement does not require periodic monitoring or testing, the permit shall contain periodic monitoring sufficient to yield reliable data from the relevant time periods that is representative of the source's compliance with the permit;
- 409.3 A restatement of the requirement of District Regulation 1-440 that the facility's owner or operator must provide the APCO with reasonable access to the premises of the facility;
- 409.4 A restatement of the requirement of District Regulation 1-441 and of Section 2-6-501 that the facility's owner or operator must provide the information, records, and reports requested or specified by the APCO;
- 409.5 A severability clause to ensure the continued validity of permit requirements in the event of a challenge to any portion of the permit;
- 409.6 The duration of the major facility review permit, not to exceed five years;
- 409.7 A statement that: (a) the owner or operator of the facility must comply with all permit conditions and limitations set forth in the major facility review permit; (b) an application for a change in the permit by the owner or operator of the facility does not revoke or limit the applicability of any permit condition in the permit; (c) the major facility review permit does not convey a property right or exclusive privilege; and (d) the facility must keep a record in a contemporaneous log when the facility changes any aspect of its operations from one permitted scenario to another;
- 409.8 Provisions specifying the conditions under which the permit may be reopened for cause and modified, revoked, reissued, or terminated, prior to the end of the term;
- 409.9 Deleted 5/2/01.

- 409.10 A schedule of compliance containing the following elements:
 - 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
 - 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
 - 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- 409.11 Terms and conditions for reasonably anticipated operating scenarios;
- 409.12 Terms and conditions for any approved permit shield;
- 409.13 A provision for payment of fees required by Regulation 3;
- 409.14 An identification of those terms and conditions of the permit which are not federally enforceable because they are not derived from any requirement of the Clean Air Act;
- 409.15 For Phase II acid rain facilities, all acid rain provisions of a permit shall be contained in a separate and complete section of the permit. This section shall contain a permit condition prohibiting emissions exceeding the allowances that a facility holds under Title IV of the Clean Air Act;
- 409.16 Any terms and conditions for emissions trading approved under Section 2-6-418;
- 409.17 A requirement for annual compliance certifications, unless compliance certifications are required more frequently than annually in an applicable requirement or by the APCO;
- 409.18 A requirement for reports of all required monitoring at least once every six months,
- 409.19 All requirements and provisions pertaining to major facility review permits as set forth in Volume II of the District's Manual of Procedures, and
- 409.20 A certification requirement for all documents submitted pursuant to a major facility review permit. The certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The certifications shall be signed by a responsible official for the facility.

(Amended 2/1/95, 10/20/99, 5/2/01)

2-6-410 Final Action for Initial Permit Issuance, Five-Year Renewal, Reopenings, and Revisions: The APCO shall take final action on each major facility review permit application as follows:

- 410.1 The APCO shall take final action on an application for an initial permit, a significant permit revision, or a permit renewal within eighteen months after receipt of an application that has been deemed complete. No permit shall be issued until after all required EPA and public review. If a facility submits a timely and complete application for renewal, all terms and conditions of the permit shall remain in effect until the renewal permit has been issued or denied.
- 410.2 The APCO shall take action to issue or deny a minor permit revision within 90 days of receipt of the application or within 15 days after the end of the EPA Administrator's 45-day review, whichever is later;
- 410.3 After the APCO has reopened an existing permit for cause, pursuant to Section 2-6-415, the APCO shall take final action to modify, revoke and reissue, or terminate that permit within 12 months after the date on which the permit is formally reopened.

- 410.4 The APCO shall take final action on an application containing an early reduction demonstration within nine months after the APCO determines that the application is complete.
- 410.5 Submittal of applications for, and the permitting, revision, and reopenings of the acid rain portion of a major facility review permit shall occur in accordance with the deadlines set forth in Title IV of the Clean Air Act and the regulations promulgated thereunder.
- 410.6 Notwithstanding the deadline set forth in subsection 410.1 above, for existing facilities that become subject to MFR on the date that the program receives EPA approval, the APCO shall take final action by July 1, 2001.

(Amended 2/1/95, 10/20/99)

2-6-411 Reports to EPA and Public Petitions for Major Facility Review Permits: For all initial applications, five-year renewals, and proposed minor and significant permit revisions pursuant to this Rule, the APCO shall submit to EPA for review and comment each proposed permit and each final major facility review permit. The EPA review shall be subject to the following:

- 411.1 EPA shall have 45 days from receipt of the proposed permit to review the proposed terms and conditions and to object to them in writing.
- 411.2 If EPA objects to the proposed terms and conditions of a permit within the specified 45-day period, the APCO shall submit appropriate revisions that address EPA's objections within 90 days after being notified of EPA's objection and issue the permit.
- 411.3 If EPA does not object to the proposed terms and conditions of a major facility review permit within the specified 45-day period, any person dissatisfied with the proposed terms and conditions may petition EPA to reconsider the matter within 60 days thereafter. Any such petition must be based on objections raised during the public comment period on the proposed permit, unless the petitioner demonstrates that it was impracticable to do so or that the grounds for the objection arose after the close of the original public comment period. EPA may object to the proposed permit on the basis of such petition. This provision does not apply to minor revisions.
 - 3.1 If the APCO has not yet issued a proposed permit, the APCO shall make appropriate revisions prior to issuing the permit.
 - 3.2 If the APCO has issued the permit following the 45-day EPA comment period but before receipt of an EPA objection based on public petition, the permit may be reopened for cause by the APCO in accordance with Section 2-6-415, or by the EPA in accordance with 40 CFR 70.7(g). In such event, the requirements of the permit shall remain in effect while the EPA or the APCO determines whether to modify, terminate, or revoke and reissue the permit.
- 411.4 Deleted 10/20/99
- 411.5 If the APCO schedules a public hearing after the proposed permit has been submitted to EPA, the APCO will withdraw the permit from EPA review, and resubmit the permit after the public hearing date.

(Amended 2/1/95, 10/20/99, 5/2/01)

2-6-412 Public Participation, Major Facility Review Permit Issuance: The APCO shall notify the public and affected states in advance of any proposed initial issuance, significant revision or five-year renewal of a major facility review permit, in accordance with the following procedures:

- 412.1 The APCO shall publish a notice in a major newspaper in the area where the facility is located and send the notice to affected states and to persons on a mailing list of persons who have requested in writing to receive these notifications. The APCO may use other methods in addition to the two above if necessary to assure adequate notice to the affected public and states.
- 412.2 The notice shall identify by name and address the facility, the permittee and the permitting authority. The notice shall include information about the operation to be permitted, any proposed change in emissions, a District

source for further information, a brief description of the comment procedures, and a description of procedures to request a hearing.

412.3 The notice shall provide at least 30 days for public comment.

412.4 The APCO shall give notice of any public hearing at least 30 days prior to the hearing.

412.5 The APCO shall keep a record of the commenting persons or states and the issues raised in all such comments for five years.

412.6 Written notification of any decision by the APCO not to incorporate any recommendations for the proposed permit that an affected state submitted during the public comment period shall be sent to U.S. EPA and affected states.
(Amended 10/20/99, 5/2/01)

2-6-413 Administrative Permit Amendment Procedures: The APCO may make administrative permit amendments as follows:

413.1 Regulations promulgated under Title IV of the Clean Air Act shall govern administrative permit amendments to the acid rain portion of any permit.

413.2 The APCO shall take final action on a request for an administrative permit amendment no later than 60 days from the receipt of the request, provided that the APCO determines that the amendment is covered under Section 2-6-201.

413.3 The APCO may initiate an administrative permit amendment provided that the amendment is covered under Section 2-6-201.

413.4 The APCO shall submit a copy of the revised permit to EPA.

413.5 The facility may implement the changes covered by the administrative permit amendment immediately upon submittal of a request.

413.6 Any request for a change in ownership shall include a written agreement between the parties to the transaction which specifies the date of transfer of the permit including permit responsibility, coverage, and liability.
(Amended 10/20/99)

2-6-414 Minor Permit Revision Procedures: The APCO shall take action on applications for minor permit revisions as follows:

414.1 The APCO shall notify EPA of the proposed minor permit revision within 5 working days of the APCO's issuance or waiver of the authority to construct required under section 2-1-301.

414.2 The APCO shall act on the proposed minor revision within 15 days after the end of EPA's 45-day review period or within 90 days of receipt of the application, whichever is later.

414.3 If prior to taking action on a proposed minor revision the APCO determines that the proposed revision should be reviewed as a significant revision, the APCO shall revise the draft permit revision accordingly and shall submit this version to the EPA. In any such event, the provisions of Sections 2-6-411 and 412 shall apply to all further consideration of the proposed revision.
(Amended 10/20/99, 5/2/01)

2-6-415 Reopening for Cause: Proceedings to reopen and reissue a major facility review permit shall follow the same procedures that apply to the issuance of an initial major facility review permit and shall affect only those parts of the permit for which cause to reopen exists. Except in the case of an emergency, the APCO shall provide to the facility a notice of intent to reopen the permit at least 30 days in advance of the proposed reopening date. The APCO shall reopen and revise a major facility review permit under the following circumstances:

415.1 Additional requirements become applicable to a major facility having three or more years remaining before that facility's next scheduled major facility review. The APCO shall complete a reopening within 18 months after promulgation of the applicable requirement. (Reopening is not required if the effective date of the additional requirement is later than the date on which that facility's next scheduled major facility review is due);

415.2 Additional requirements become applicable to Phase II acid rain facilities under the acid rain program. Upon approval by the EPA, excess emissions

offset plans developed under this program shall be incorporated into the permit;

415.3 The APCO determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or

415.4 The APCO determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

2-6-416 Term for Major Facility Review: Once a major facility review permit is issued to a facility, except insofar as the permit must be reopened in accordance with Section 2-6-415, the terms and conditions of that permit shall remain valid for a period of five years from the date of issuance unless the facility agrees to a shorter term. However, Phase II acid rain facilities shall not have permits that contain a shorter term. At the conclusion of every such term, the APCO must review the terms and conditions of a major facility review permit in the same way as an application for an initial major facility review permit.

416.1 The issuance of a revision to an existing major facility review permit at any time during the course of the term for which the terms and conditions of that permit are valid shall not affect or extend the renewal date.

416.2 A facility subject to this rule shall continue to provide throughput update information as required by the District and to pay the annual fees required by Regulation 3, including Schedule P. (Amended 10/20/99, 5/2/01)

2-6-417 Operational Flexibility Procedures: A facility shall give written notice to the APCO of any changes made to the facility, pursuant to Section 2-6-305 - Operational Flexibility. The notice shall be received by the APCO at least 30 days prior to the change. The notice shall contain a description of the change, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The facility and the District shall each attach such notice to its copy of the permit.

2-6-418 Emissions Trading Procedures: The responsible official for a facility may propose that an emissions trading provision be included in its major facility review permit as follows:

418.1 The responsible official shall submit an application pursuant to Regulation 2-1-301 to incorporate the trading provisions into the permits of the affected sources. The application must identify the District regulations that provide for the proposed trading provisions and demonstrate that the trading provisions comply with all applicable District regulations.

418.2 The APCO shall approve the request if the provisions comply with all applicable District regulations.

418.3 The proposal shall include an emissions cap allowing for the trading of emissions increases and decreases, permit conditions, recordkeeping requirements and replicable procedures for determining compliance with applicable requirements;

418.4 The proposed emissions trades shall be quantifiable and federally enforceable; and

418.5 Once the emissions trading provisions have been incorporated into the permit, the facility shall notify the APCO in writing at least seven days prior to a trade. The notification shall state when the trade will occur, what change in emissions will result, and how the trade will comply with the emission trading provisions.

418.6 The APCO shall incorporate the trading provisions in the initial MFR permit issuance, or, if the permit has been issued, shall incorporate the trading provisions into the permit MFR using the minor or significant permit revision procedures. (Adopted 5/2/01)

2-6-419 Availability of Information: The contents of permit applications, compliance plans, emissions or compliance monitoring reports, and compliance certification reports shall be available to the public, subject to the restrictions of the District's Administrative Code, Section 11. The contents of the permit shall be available to the public and shall not be subject to the above restrictions.

- 2-6-420 Application for a Synthetic Minor Operating Permit:** A facility which seeks to become a synthetic minor facility shall apply for a synthetic minor operating permit in accordance with the requirements of this rule. If a synthetic minor facility plans a physical or operational change which would increase its potential to emit such that it would exceed any threshold for a major facility, the facility shall become subject to major facility review and shall apply for a major facility review permit prior to making the change. A facility may also elect to accept synthetic minor permit conditions to limit the potential to emit of a source or operation to avoid requirements other than Major Facility Review. (Amended 2/1/95, 10/20/99, 5/2/01)
- 2-6-421 Timely Application for a Synthetic Minor Operating Permit:** An application for a synthetic minor operating permit or synthetic minor operating permit revision shall be submitted in a timely manner as described below:
- 421.1 A facility which elects to apply for a synthetic minor operating permit in order to avoid the requirement to obtain a major facility review permit shall apply for and receive a synthetic minor operating permit prior to the date by which it would have to apply for a major facility review permit.
 - 421.2 Any facility not subject to the requirements of Regulation 2, Rule 6, may apply for a synthetic minor operating permit at any time, in accordance with Section 2-6-422.
 - 421.3 A facility seeking a synthetic minor operating permit revision (as defined by Section 2-6-232) shall apply for the revision in accordance with Section 2-6-422 and receive approval prior to making the change at the facility.
 - 421.4 For a revision to a synthetic minor operating permit which will not change any condition of the permit that establishes a facilitywide emission limit or that specifies the monitoring and recordkeeping requirements necessary to verify ongoing compliance with a facilitywide emission limit, an application must be received by the APCO in accordance with the requirements of Regulation 2, Rule 2, New Source Review.
 - 421.5 For a physical or operational change to a synthetic minor facility which would increase the facility's potential to emit to a level above that of a major facility, the facility must undergo preconstruction review, apply for a major facility review permit in accordance with the requirements of this rule, and apply for a cancellation of the synthetic minor permit prior to commencing the change. Any increase in the emission limits shall be subject to the requirements of Regulation 2, Rules 1 and 2.
 - 421.6 Renewals of synthetic minor operating permits shall be made in accordance with the requirements of Regulation 3-207.
 - 421.7 Deleted 10/20/99 (Amended 2/1/95, 10/20/99, 5/2/01)
- 2-6-422 Complete Application for a Synthetic Minor Operating Permit:** An application for a synthetic minor operating permit or for a synthetic minor operating permit revision (as defined by Section 2-6-232) shall contain the following:
- 422.1 All relevant BAAQMD permit application forms;
 - 422.2 A statement certifying payment of any fee required by District Regulation 3, including Schedule P;
 - 422.3 Identification and description of all existing sources at the facility, including sources that are exempt from permits under Regulation 2, Rule 1;
 - 422.4 A calculation (following the protocol set forth in the Manual of Procedures, Volume II, Part 3, subsection 2.2.2.c) of annual and monthly maximum emissions of regulated air pollutants and hazardous air pollutants from the facility. All fugitive emissions of hazardous air pollutants shall be included. For fugitive emissions of regulated air pollutants, only those from facility categories listed in the Manual of Procedures, Volume II, Part 3, Section 1 shall be included;
 - 422.5 Proposed permit conditions to limit facilitywide emissions to below the thresholds for a major facility; and
 - 422.6 Proposed permit conditions imposing monitoring, recordkeeping and reporting requirements sufficient to determine ongoing compliance.

Applications for a synthetic minor permit revision shall include the above information only for those sources that will be modified. Applications for a synthetic minor operating permit for the purpose of avoiding a requirement other than major facility review shall include the above as they apply to the sources for which limits are proposed. (Amended 2/1/95, 10/20/99)

2-6-423

District Procedures for Synthetic Minor Operating Permits: The APCO shall take action on applications for synthetic minor operating permits and for synthetic minor operating permit revisions as follows:

- 423.1 Completeness: The APCO shall determine if the application is complete within 30 days of receipt, or within a longer time period as agreed upon by both the applicant and the APCO.
- 423.2 Permit Content: The synthetic minor operating permit shall contain all information and provisions pertaining to synthetic minor operating permits as set forth in Volume II of the District's Manual of Procedures including:
 - 2.1 Quantifiable and practically enforceable permit conditions limiting the facility's potential to emit to no greater than 95 tons per year of any regulated air pollutant, 9 tons per year of any single hazardous air pollutant, and 23 tons per year of any combination of hazardous air pollutants, or;
 - 2.2 Quantifiable and practically enforceable permit conditions limiting a source or operation's potential to emit to no greater than 90 percent of the threshold for the requirement that is to be avoided, and;
 - 2.3 Permit conditions requiring monitoring, recordkeeping, and reporting sufficient to determine compliance with the emission limits set forth in subsection 423.2.1 or 423.2.2.
- 423.3 Deleted 10/20/99
- 423.4 Reports to EPA: The APCO shall provide to EPA a copy of each proposed and final synthetic minor operating permit.
- 423.5 Final Action: The APCO shall take final action on synthetic minor operating permits as follows:
 - 5.1 Initial Application and Cancellations: Within 180 days following the acceptance of the application as complete.
 - 5.2 Revisions: In accordance with the requirements of Regulation 2-1-408;
- 423.6 Revisions: The APCO shall ensure that revisions of synthetic minor permits comply with subsection 2-6-423.2. Revisions of permit conditions shall also be in accordance with the requirements of Regulation 2, Rules 1 and 2.
- 423.7 Cancellation of Synthetic Minor Permits: A facility may petition the APCO to cancel its synthetic minor operating permit because its potential to emit due to its physical or operational design has dropped below the major source threshold or because proposed modifications to the facility would increase the facility's potential to emit to a level above that of a major facility. The facility must comply with the synthetic minor operating permit until the APCO cancels the permit. The permit that replaces the synthetic minor operating permit will contain any emission limits contained in the synthetic minor operating permit. Revisions of the permit conditions shall be in accordance with the requirements of Regulation 2, Rules 1 and 2.

(Amended 2/1/95, 10/20/99, 5/2/01)

2-6-424

Applicability: The APCO shall evaluate the applicability of this rule to each facility as part of the District's annual permit renewal process required by Health & Safety Code Section 42301(e). Within 30 days of a written request for a process statement or specific emission-related information by the APCO or EPA, a facility shall submit the requested information. (Adopted 10/20/99)

2-6-425

Facility List: The APCO shall maintain a list of facilities that are subject to this rule together with the specific provisions applicable to each facility. The APCO shall also maintain a list of facilities that are not subject to this rule. The facility lists shall be available to the public. (Adopted 10/20/99)

2-6-426 Compliance Certification Procedures: All compliance certifications required in permit applications or by major facility review permits shall be prepared in accordance with the following procedures:

426.1 A responsible official for the facility shall certify all compliance certifications. The certification shall state that the compliance certification is true, accurate, and complete based on information and belief formed after reasonable inquiry.

426.2 Effective May 2, 2002, all applicants for a major facility review permit shall submit a new certification of compliance on every anniversary of the application date if the permit has not been issued. (Adopted 5/2/01)

2-6-427 Statement of Basis: The APCO shall, in conjunction with the issuance of any major facility review permit, prepare a statement that, in conjunction with the permit itself, sets forth the legal and factual basis for the draft permit conditions. This statement shall explain the basis for the decisions made by the APCO in issuing the major facility review permit, including the APCO's reasoning for imposition of additional monitoring requirements, and for the creation of any permit shield provisions. The statement of basis may, but need not, address requirements that are not applicable and for which no permit shield is provided. The statement of basis need not address the rationale underlying the establishment of any applicable requirement.

(Adopted 4/16/03)

2-6-500 MONITORING AND RECORDS

2-6-501 Recordkeeping: The APCO may require that the owner or operator of any facility subject to this rule keep any records that are relevant or necessary to enable the APCO to determine emissions from the facility. The facility shall keep such records on site for five years from the date of entry and shall make the records available to the APCO upon request.

2-6-502 Monitoring Reports, Major Facility Review Permit: Every six months, the facility shall prepare and submit to the District reports of any monitoring required by the major facility review permit. A responsible official shall certify that all such reports are true, accurate, and complete based on information and belief formed after reasonable inquiry. In addition to the reporting requirements set forth in Regulation 1, subsection 522.7 and Section 542, the facility shall promptly identify and report to the APCO all monitored excesses and any other deviations from the requirements of the permit.

(Amended 10/20/99, 5/2/01)

2-6-503 Monitoring: The APCO may require that the owner or operator of any facility subject to this rule conduct any monitoring that is necessary to enable the facility and the APCO to determine emissions from the facility. The APCO may specify the format and frequency of reports for all monitoring.

(Adopted 10/20/99, 5/2/01)

2-6-600 MANUAL OF PROCEDURES

2-6-601 Major Facility Review Permit Procedures: The specific procedures for application submittals, the engineering evaluation and the required permit content for major facility review permits are set forth in Volume II of the District's Manual of Procedures.

2-6-602 Synthetic Minor Operating Permit Procedures: The specific procedures for the engineering evaluation and the required permit content for synthetic minor operating permits are set forth in Volume II of the District's Manual of Procedures.

**REGULATION 2
PERMITS
RULE 7
ACID RAIN
(Adopted September 21, 1994)**

The Bay Area Air Quality Management District (BAAQMD) hereby adopts and incorporates by reference the provisions of 40 CFR Part 72 for purposes of implementing an acid rain program that meets the requirements of Title IV of the Clean Air Act as of the date that the Environmental Protection Agency (EPA) approves the District's Title V program (which is set forth in Regulation 2, Rule 6). The effective date of this rule shall be the date on which the District receives delegation from the EPA for the implementation of the Title V program.

For the purposes of this rule, the term "permitting authority", as that term is used in Part 72, shall mean the Bay Area Air Quality Management District, and the term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.

For those facilities which are subject to this Rule, if the provisions or requirements of 40 CFR Part 72 are determined to conflict with Regulation 2, Rule 6, the provisions and requirements of Part 72 shall apply and take precedence.

In the event that EPA makes any subsequent amendments to Part 72, all such amendments shall be deemed to be included as part of this Rule without further action by the District.

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REGULATION 2
PERMITS
RULE 9
INTERCHANGEABLE EMISSION REDUCTION CREDITS

Adopted April 7, 1999

2-9-100 GENERAL

2-9-101 Purpose: The purpose of this regulation is to provide a methodology to calculate and track the generation, use and trading of Interchangeable Emission Reduction Credits (IERC's) from stationary sources of nitrogen oxides (NOx) within the District in order to provide a voluntary, cost-effective, alternate means of compliance with certain District NOx rules and regulations.

2-9-200 DEFINITIONS

2-9-201 Bankable Pollutants: Interchangeable emission reduction credits (IERC's) of the following pollutants may be deposited in the IERC Bank: nitrogen oxides.

2-9-202 Banking Certificate: A document issued by the APCO which indicates the amount of pollutant-specific IERC's which are available for use, trade, purchase, sale or other means of commercial transaction during the credit use life, as established by the effective and expiration dates on the banking certificate. A banking certificate does not constitute a property right. A banking certificate is not intended to recognize any pre-existing right to emit air contaminants, but to provide a mechanism for the APCO to recognize the existence of reductions of air contaminants that can be used or traded in accordance with the provisions of this rule.

2-9-203 Best Available Retrofit Control Technology (BARCT): An emission limitation, defined in Health & Safety Code Section 40406, that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source.

2-9-204 Credit Generation Period: A time period of twelve consecutive months or less during which emissions are permanently and enforceably reduced relative to a baseline period. The initial credit generation period is determined by the first IERC banking application for a particular emission reduction activity. The initial credit generation period shall not be more than 30 months prior to the submittal of the first complete IERC banking application for a particular emission reduction activity.

2-9-205 Credit Use Life: The time period during which an IERC may be used, traded, purchased, sold or made part of a commercial transaction.

2-9-206 Curtailment: An emission reduction from a permitted stationary source that results from a reduction in operation, such as reduced hours of operation, throughput, material usage or fuel usage.

2-9-207 Effective Date: The first day on which an IERC may be used. An effective date may be the date of issuance of the IERC Certificate, or it may be a future date, typically in one-year increments from the date of issuance of the IERC Certificate.

2-9-208 Emission Reduction Credit (ERC): An emission reduction which was generated and banked in accordance with Regulation 2, Rule 4.

2-9-209 Enforceable: The District determination that credible and relevant evidence exists throughout the duration of the credit generation period in order to enforce compliance with the terms of this rule.

2-9-210 Expiration Date: The date after which an IERC can no longer be used.

2-9-211 Facility: For the purposes of this rule only, a facility is any property, building, structure or installation (or any aggregation of facilities) located on one or more contiguous or adjacent properties and under common ownership or control of the same person that emits or may emit any air pollutant and is considered a single major

industrial grouping (identified by the first two-digits of the applicable code in *The Standard Industrial Classification Manual*).

211.1 Related sources on a single property or contiguous properties, even though under different ownership and/or operatorship, shall be considered one facility. Related sources are those sources where the operation of one is dependent upon or affects the operation of other sources.

211.2 Facilities under the same ownership or entitlement to use that are located within a distance of three (3) miles, property line to property line, shall be considered one facility if the facilities have the same first two digits in their Standard Industrial Classification codes, as determined from *The Standard Industrial Classification Manual*.

2-9-212 Interchangeable Emission Reduction Credit (IERC): A real, permanent, quantifiable, enforceable and surplus emission reduction expressed in the unit of pounds of a specific pollutant in the year generated, and has a specified expiration date. IERC's are subject to the prevailing "environmental benefit surcharge" at the time of credit usage.

2-9-213 Permanent: An emission reduction which exists for the duration of the credit generation period.

2-9-214 Real: An emission reduction that constitutes an actual decrease in air emissions.

2-9-215 Reasonably Available Control Technology (RACT): For sources which are to continue operating, RACT is the lowest emission limit that can be achieved by the specific source by the application of control technology taking into account technological feasibility and cost-effectiveness, and the specific design features or extent of necessary modifications to the source. For sources which are or will be shut-down, RACT is the lowest emission limit that can be achieved by the application of control technology to similar, but not necessarily identical categories of sources, taking into account technological feasibility and cost-effectiveness of the application of the control technology to the category of sources only and not to the shut-down source.

2-9-216 State Implementation Plan (SIP): A plan, approved under Section 110 or 172 of the Clean Air Act, which provides for the implementation, maintenance and enforcement of a primary or secondary air quality standard.

2-9-217 Stationary Source: Any article, machine, equipment, operation, contrivance or related grouping of such which may produce and/or emit air pollutants, and which is or was located at a facility during the credit generation period.

2-9-218 Surplus: An emission reduction calculated in accordance with this regulation that is not required or assumed during the credit generation period, and which exceeds the emission reductions required or assumed during the credit generation period by a stationary source using Reasonably Available Control Technology (RACT), Best Available Retrofit Control Technology (BARCT) or by any District, California or federal permit, rule, regulation, law, ordinance or the most recent District approved Clean Air Plan or Air Quality Management Plan. If the control measure or emission standard in the most recently District approved rule or air quality plan is less stringent than the control efficiency or emission standard in the California State Implementation Plan (SIP) for a specific source category, then the federally approved SIP will be used for purposes of determining surplus reductions.

2-9-300 STANDARDS

2-9-301 Bankable Interchangeable Emission Reduction Credits – General Provisions:

301.1 An emission reduction of a bankable pollutant may be banked as an Interchangeable Emission Reduction Credit, if it meets the following criteria:

- 1.1 The emission reduction is generated by a stationary source that the District includes in its Emission Inventory. A source is included in the Emission Inventory if it has a District Permit to Operate (if one is

required) or is a member of a source category included in the Emission Inventory (if no permit is required).

- 1.2 The emission reduction is real, permanent, quantifiable, enforceable and surplus.
- 1.3 The emission reduction did not result from the shutdown or curtailment of a source.
- 1.4 Any secondary emissions resulting from the emission reduction comply with the District's Toxic Risk Management Policy for new sources.

301.2 An emission reduction from a permitted or exempt stationary source that was banked in accordance with the procedures described in Regulation 2-4, can be converted to an IERC, in accordance with Section 2-9-305, provided the emission reduction did not result from the shutdown or curtailment of a source.

301.3 An IERC retains its full value during its credit use life.

301.4 An IERC is subject to the environmental benefit surcharge at the time of its usage, as set forth in Section 2-9-306.

301.5 Individual banking certificates for IERC's resulting from multi-year credit generation periods shall be issued for each year of credit generation.

301.6 An IERC may be combined with one or more additional IERC's and used at the same time (i.e., stacked) provided the credit use life of each IERC has commenced and has not yet expired at the time of the stacked IERC use.

301.7 Emission reductions where the demand for the services or product would merely shift to other sources in the District, with little or no decrease in emissions basin-wide, cannot be banked.

7.1 The APCO may require submittal of data to document that reductions will not result in such a shift, and could therefore be banked.

7.2 Only the net reduction (if any) shall be banked for operations where the operation is being transferred elsewhere within the same stationary source or to a different stationary source owned by the applicant within the District.

2-9-302 Use of IERC's: Except as limited by Section 2-9-304, an IERC may only be used at the same facility in which the IERC is generated, as part of an Alternative Compliance Plan to comply with a NO_x emission standard of a rule in Regulation 9, or permit condition that is based on such a rule. IERC's must be in the facility operator's possession prior to generating emissions in excess of the regulatory standards.

2-9-303 Alternative Compliance Plan using IERC's: An alternative compliance plan (ACP) which satisfies all the following requirements may be used to comply with any rule identified in Section 2-9-302:

303.1 Only IERC's that have been generated, approved, and banked in accordance with this rule may be used in an ACP.

303.2 NO_x emissions from each source or group of sources (if grouping is allowed under the applicable emission standard) in the ACP, less IERC's applied, shall not exceed that amount or level of NO_x emissions which would result if the affected source or sources complied with the applicable BARCT requirements of Regulation 9 on a daily basis.

303.3 The ACP must be reviewed and approved by the APCO on an annual basis.

303.4 The ACP must include methods for demonstrating compliance on a daily basis, by listing:

4.1 All sources covered by the ACP;

4.2 Maximum firing rate (higher heating value) of each source;

4.3 Type(s) of fuel and heat content (higher heating value) of each fuel combusted in each source;

4.4 NO_x emission rate for each type of fuel combusted in each source;

4.5 A comparison of the actual nitrogen oxide emission rate and the nitrogen oxide emission rate that would be allowed under the applicable BARCT provision(s) of Regulation 9, in the absence of this rule, for

each source, or group of sources (if grouping is allowed under the applicable emission standard),

4.6 Detailed calculation of the amount of IERC's required for BARCT compliance, in accordance with the procedure in Section 2-9-605;

303.5 The plan shall contain credit only for IERC's that have been evaluated and approved in accordance with this rule.

303.6 Failure to comply with any emission calculation, emission testing, monitoring, record keeping or reporting provision of an approved plan, or failure to surrender sufficient IERC banking certificates within 30 days following the end of the ACP period, shall constitute a violation of the applicable Regulation 9 BARCT Rule(s).

2-9-304 Restrictions on the Use of IERC's: An IERC may not be used to fully or partially comply with:

304.1 Any emission standard at any facility other than the facility at which the IERC is generated.

304.2 Best Available Control Technology requirements in Regulation 2-2-301.

304.3 New Source Performance Standards in Regulation 10.

304.4 National Emission Standards for Hazardous Air Pollutants (NESHAP).

304.5 Federal Maximum Achievable Control Technology (MACT) standards.

304.6 Emission limitations or control requirements on toxic emissions imposed by the District's Risk Management Policy.

304.7 Any requirement in Regulation 9 with an implementation date before April 7, 1999.

304.8 Any requirement in Regulation 9 that has been approved by EPA for inclusion in the California SIP, unless this Regulation has been approved by EPA for inclusion in the SIP.

2-9-305 Conversion of an ERC to an IERC: An existing stationary source emission reduction credit (ERC) that was not the result of a shutdown or a curtailment and that was banked in accordance with the procedures in Regulation 2, Rule 4, may be converted to an Interchangeable Emission Reduction Credit for the same pollutant, in accordance with the procedure in Section 2-9-604. Once an ERC has been converted to an IERC, the IERC may not be converted back to an ERC.

2-9-306 Environmental Benefit Surcharge: The user of IERC's shall provide 10 percent more IERC's than are required to comply with the BARCT rule for which the IERC's are being used.

2-9-400 ADMINISTRATIVE REQUIREMENTS

2-9-401 IERC Application: In order to conduct any of the transactions listed below, a person shall submit an application on a form specified by the APCO. Fees for such applications are provided in Regulation 3.

401.1 Deposit IERC's in the bank;

401.2 Transfer ownership of IERC's to another party;

401.3 Convert emission reduction credits (ERC's) that were banked under Regulation 2, Rule 4 into IERC's;

401.4 Use IERC's in lieu of compliance with the BARCT rule(s) specified in Section 2-9-302.

2-9-402 Complete IERC Banking Application: The APCO shall determine whether a banking application is complete not later than 30 calendar days following receipt of the application, or after a longer time period agreed upon in writing by both the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision, specifying the information that is required. The applicant shall have 90 days to submit the requested information. Upon receipt of all requested information, no new 30-day period to determine completeness shall be initiated. If no data is submitted or the application is still incomplete, the APCO may cancel the banking application with written notification

to the applicant. Upon a determination that the application is complete, the APCO shall notify the applicant in writing. Thereafter, only information to clarify, correct, or otherwise supplement the information submitted in the application, may be requested. Withdrawal of a banking application by an applicant shall result in cancellation of the application; any re-submittal may be evaluated using a new baseline or credit generation period. An applicant may submit a banking application in advance of the credit generation period for the purpose of establishing the baseline and calculation procedures. Such an application will also be subject to the review, processing and approval procedures in this section.

2-9-403 Preliminary Decision, Minor Deposits: Within 60 days following the acceptance of an IERC application as complete, which is not subject to the publication, public comment and inspection requirements of Section 2-9-405, or, with the consent of the applicant, such longer period as may be agreed upon, the APCO shall make a preliminary decision and notify the applicant in writing as to whether the APCO intends to approve, conditionally approve, or deny the application.

2-9-404 Preliminary Decision, Applications Subject to Publication, Public Comment and Inspection: Within 90 days following the acceptance of an IERC application as complete, which is subject to the publication, public comment and inspection requirements of Section 2-9-405, or, with the consent of the applicant, such longer period as may be agreed upon, the APCO shall make a preliminary decision and notify the applicant in writing as to whether the APCO intends to approve, conditionally approve, or deny the application.

2-9-405 Publication, Public Comment and Inspection: Before approving the banking of an IERC in excess of 40 tons of any pollutant or before approving the initial Alternative Compliance Plan (ACP) for a source or group of sources, the APCO shall cause to be published in at least one newspaper of general circulation within the District, and be sent to any individual submitting a written request to the APCO for notification, a notice stating the preliminary decision of the APCO to approve the banking of IERC's or to approve the ACP, and inviting written public comment for a 30-day period following the date of publication. The APCO shall make available for public inspection at District headquarters the information submitted by the applicant, the APCO's analysis, and the preliminary decision to grant or deny the application, including the reason therefore and any proposed conditions. Such information shall also be transmitted to adjacent air pollution control districts, the California Air Resources Board, and the U.S. EPA.

2-9-406 Final Approval of Banking Certificate or ACP: The APCO shall issue an IERC banking certificate or ACP within 30 days of the issuance of the preliminary decision for an approved application not subject to Section 2-9-405, or within 30 days of the close of the public comment period if the application is approved. The IERC banking certificate shall identify the owner of the certificate, the quantity of the emission reduction credits of each pollutant for deposit in the emissions bank in the units of "pounds" in the year generated, the effective date and expiration date of the credits, the location of the facility at which the reduction was created, any conditions on use of the emission reduction credits, and any other data deemed appropriate by the APCO.

2-9-407 Appeal to the Hearing Board, Banking: Any person dissatisfied with the APCO's approval or disapproval of an application for banking IERC's may appeal that decision within 10 calendar days to the District Hearing Board, in accordance with the provisions of Regulation 2-1-410.

2-9-408 Banking Register: The APCO shall establish and maintain a banking register, which shall consist of a public record of all deposits, deposit applications, withdrawals, and transfers of IERC's.

2-9-409 Transfer and Withdrawal Procedures for Deposits: The following procedures shall apply to withdrawal (use) or transfer of banked IERC's:

409.1 **Transfer for Later Use:** If the banked IERC's are transferred to a new owner for later use, the owner of record shall submit the old Certificate signed by the owner of record and by the new owner. The APCO shall retain the old

Certificate, issue a new Certificate in the name of the new owner for the amount transferred, and issue a new Certificate to the existing owner for any portion not transferred.

409.2 **Transfer for Immediate Use:** If the banked IERC's are transferred to a new owner for immediate use, the owner of record shall submit the old Certificate signed by the owner of record and by the new owner. The APCO shall retain the old Certificate, and issue a new Certificate to the existing owner for any portion not transferred. A new Certificate will be issued to the new owner only if the amount transferred exceeds the amount to be used.

409.3 **Withdrawal for Full or Partial Use:** The owner of record shown in the APCO's banking register shall surrender the IERC Banking Certificate in order to withdraw the banked IERC's. If all of the banked IERC's are used, the APCO shall retain the Certificate. If only a portion of the banked IERC's is used, the APCO shall retain the old Certificate and issue a new Certificate identifying the remaining portion of the IERC's.

2-9-410 IERC Liability: For any transfer of IERC's, the generator of the IERC's shall be subject to enforceable permit conditions in the appropriate permits to operate to ensure that the IERC's are permanent and to hold the generator responsible for compliance with those conditions. The user and generator of any transferred IERC's shall be jointly and severally liable for any failure of the IERC generator to comply with appropriate District requirements that allow for the use of the IERC's.

2-9-411 Annual Report to California Air Resources Board: The APCO shall provide an annual report to the California Air Resources Board on all IERC banking transactions which have occurred during the preceding year. A copy of this report shall also be sent to the Environmental Protection Agency, Region IX. This report shall include the following:

411.1 The quantity of IERC's generated and used, by pollutant;

411.2 The extent to which IERC's were used to comply with Best Available Retrofit Control Technology, by rule and source category;

411.3 A discussion of the impact that use of IERC's had on annual pollutant-specific emissions, relative to the District's emission inventory and Clean Air Plan.

411.4 A demonstration that the use of IERC's, in the aggregate, results in no greater annual pollutant-specific emissions than would have occurred in the absence of this rule.

411.5 On a triennial basis, the District's report shall provide an evaluation of the IERC rule as an alternative means of compliance with applicable District rules.

2-9-500 MONITORING AND RECORDS

2-9-501 Monitoring and Record Keeping: The APCO shall impose monitoring, record keeping, and/or permit condition requirements necessary to determine, verify and enforce compliance with the provisions of this rule.

2-9-502 Alternative Compliance Plan Record Keeping and Reporting:

502.1 The information required in subsection 2-9-303.4 shall be available for inspection by the APCO on each production day.

502.2 The person submitting the ACP shall retain records for five years from the date the record was made, and shall submit such information as required by the APCO to determine compliance with the ACP.

502.3 The ACP shall include quarterly reports submitted to the APCO, within 30 days following the end of each calendar quarter, or other 3-month interval established in the plan. Each quarterly report shall include:

3.1 A summary of the amount of IERC's used during the preceding quarter;

3.2 A running total of all IERC's used during the current ACP period;

- 3.3 A projection of the amount of IERC's that will be needed for the entire ACP period, based on the IERC use rates calculated in Sections 502.3.1 and 502.3.2; and
 - 3.4 Certification that the facility possesses IERC's equal to the amount projected in Section 502.3.3 or a description of how the facility will adjust its operation so that the amount of IERC's needed does not exceed the amount of IERC's possessed by the facility.
- 502.4 Within 30 days following the end of the ACP period, the facility shall submit an annual reconciliation report summarizing the amount of IERC's used during the preceding 12-month ACP period, and shall surrender the banking certificates for all IERC's used during that ACP period plus the applicable environmental benefit surcharge.

2-9-600 MANUAL OF PROCEDURES

2-9-601 Emission Reduction Calculations - General Requirements: The emission reductions which are used to generate IERC's shall meet all of the following requirements, as well as the applicable requirements in sections 2-9-602 through 2-9-605.

- 601.1 The applicant must demonstrate that the reduction is real, permanent, quantifiable, enforceable and surplus.
- 601.2 IERC's shall be registered in one-year increments in the units of pounds of each specific bankable pollutant.
- 601.3 Each IERC banking certificate shall include the effective date and expiration date of the credits.
- 601.4 The effective date for the first one-year increment shall be the last day of the initial credit generation period. The effective date of each successive one-year increment shall be the day following the last day of the previous increment.
- 601.5 IERC's shall expire five years after their effective date.

2-9-602 Emission Reduction Calculations - Baseline Throughput and Emission Rate: The following methodology shall be used to calculate baseline emissions.

- 602.1 The baseline period consists of the 5 year period immediately preceding the initial IERC credit generation period. The applicant must have sufficient records of the source's operation to substantiate the emission rate and throughput during the baseline period.
- 602.2 Baseline throughput is the lesser of:
 - 2.1 actual average throughput during the baseline period; or
 - 2.2 average permitted throughput during the baseline period, if limited by permit condition.
- 602.3 Baseline emission rate, expressed in the units of mass of emissions per unit of throughput, is the average actual emission rate during the baseline period. Periods where the actual emission rate exceeded regulatory limits shall be excluded from the average.
- 602.4 Baseline Throughput and Emission Rate - Fully Offset Source: For a source which has, contained in a permit condition, an emission cap or emission rate which has been fully offset by the facility in accordance with the provisions of Regulation 2, Rule 2 (without using emission reductions from the Small Facility Banking Account), the baseline throughput and baseline emission rate shall be based on the levels allowed by the permit condition.

2-9-603 Methodology for Calculating Interchangeable Emission Reduction Credits from a Stationary Source: The APCO shall determine the emission reduction credits which qualify as IERC's from stationary source as follows:

- 603.1 Calculate the amount of IERC's as follows:

- 1.1 Determine the baseline adjusted emission rate, by adjusting the baseline emission rate downward, if necessary, to comply with the most stringent of RACT, BARCT, and District rules and regulations in effect during the credit generation period. The baseline adjusted emission rate may be different for successive credit generation periods, if RACT, BARCT or District rules and regulations change from one credit generation period to the next.
 - 1.2 Determine the baseline adjusted emissions (baseline throughput multiplied by the baseline adjusted emission rate = A)
 - 1.3 Determine the credit generation period actual emissions (actual throughput multiplied by actual emission rate = B)
 - 1.4 Determine the credit generation period non-curtailement emissions (baseline throughput multiplied by actual emission rate = C)
 - 1.5 Subtract the greater of B and C from A to obtain the amount of IERC's. $[A - (\text{greater of B or C})] = \text{IERC's}$
 - 1.6 For prospective IERC calculations, the emission rate and throughput during the credit generation period shall be imposed as permit condition limits on the source during the credit generation period
- 603.2 The maximum number of credit generation periods that may be evaluated under a single IERC banking application is three. New sets of three credit generation periods may be re-evaluated under subsequent IERC banking applications. All subsequent IERC applications shall use the same baseline period that was established for the original IERC application for the same emission reduction technique at the same source.
- 603.3 Issue IERC certificates for the number of credit generation periods determined above. The first certificate will have an effective date immediately following the end of the first credit generation period. Each subsequent certificate will have an effective date one year later than the preceding certificate.
- 603.4 The expiration date of each certificate will be five years following its effective date.

2-9-604 Procedure to Convert an ERC to an IERC: The following is the method to convert any ERC which was banked in accordance with Regulation 2, Rule 4 into an IERC. An ERC based on a shutdown or curtailment of a source may not be converted to an IERC.

- 604.1 The applicant shall surrender the ERC Banking Certificate.
- 604.2 Determine the original ERC baseline throughput and emission rate, from the original ERC banking application, and any necessary supplemental information provided by the applicant.
- 604.3 The first credit generation period is the 12-month period immediately following the original ERC baseline period.
- 604.4 Follow the methodology in Section 2-9-603, using the baseline throughput and emission rate and first credit generation period determined above in 604.2 and 604.3.

2-9-605 Calculation Procedure to Determine the Required Amount of IERC's for BARCT Compliance: The following is the method to determine the amount of IERC's required to be surrendered to the District instead of BARCT compliance.

- 605.1 Actual Daily Emissions (A): Calculate the actual daily emissions from the source(s) based on the actual emission rate and daily throughput for each day during the ACP period.
- 605.2 Allowable Daily Emissions (B): For each day during the ACP period, multiply the applicable BARCT emission rate by the same actual daily throughput that is used in Section 2-9-605.1 above. This product is the allowable daily emissions under the BARCT rule, in the absence of IERC use.
- 605.3 Daily-Required IERC's: For each day during the ACP period in which the actual daily emissions (A) exceed the allowable daily emissions (B), subtract

the allowable daily emissions that were determined per Section 2-9-605.2 (B) from the actual daily emissions that were determined per Section 2-9-605.1 (A). Apply the environmental benefit surcharge specified in Section 2-9-306. This total is the amount of IERC's that must be supplied for that day. This procedure is represented by the following equations:

If A is greater than B, then $\text{IERC's} = (A - B) \times (1.10)$ for that day.

If A is less than or equal to B, then $\text{IERC's} = \text{ZERO}$ for that day.

- 605.4 Total IERC's for ACP: Sum all of the daily-required IERC's to determine the total IERC's required for the entire ACP period. Within 30 days following the end of the ACP period, the owner or operator of the facility must surrender the requisite IERC banking certificates to cover the amount of IERC's required for the ACP period. Failure to supply enough IERC's constitutes a violation of the applicable BARCT rule(s).

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Bay Area Air Quality Management District

July 2, 2003

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REGULATION 3 FEES

(Adopted June 18, 1980)

3-100 GENERAL

3-101 Description: This regulation establishes fees to be charged for Hearing Board filings, for permits, banking, experimental exemptions, renewal of permits, costs of environmental documentation, asbestos operations, air toxics inventories, and soil excavation and underground tank removals.

(Amended 7/6/83; 11/2/83; 2/21/90; 12/16/92; 8/2/95; 12/2/98; 5/21/03)

3-102 Deleted July 12, 1989

3-103 Exemption, Abatement Devices: Installation, modification, or replacement of abatement devices on existing sources are subject to fees pursuant to Section 3-302.3. All abatement devices are exempt from annual permit renewal fees. However, emissions from abatement devices, including any secondary emissions, shall be included in facility-wide emissions calculations when determining the applicability of and the fees associated with Schedules M, N, and P.

(Amended 6/4/86; 7/1/98; 6/7/00)

3-104 Deleted August 2, 1995

3-105 Exemption, Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees: Fees shall not be required, pursuant to Section 3-322, for operations associated with the excavation of contaminated soil and the removal of underground storage tanks if one of the following is met:

105.1 The tank removal operation is being conducted within a jurisdiction where the APCO has determined that a public authority has a program equivalent to the District program and persons conducting the operations have met all the requirements of the public authority.

105.2 Persons submitting a written notification for a given site have obtained an Authority to Construct or Permit to Operate in accordance with Regulation 2, Rule 1, Section 301 or 302. Evidence of the Authority to Construct or the Permit to Operate must be provided with any notification required by Regulation 8, Rule 40.

(Adopted 1/5/94; Amended 5/21/03)

3-106 Deleted December 2, 1998

3-107 Exemption, Sources Exempt from Permit Requirements: Any source that is exempt from permit requirements pursuant to Regulation 2, Rule 1, Sections 103 through 128 is exempt from permit fees. However, emissions from exempt sources shall be included in facility-wide emissions calculations when determining the applicability of and the fees associated with Schedules M, N, and P.

(Adopted June 7, 2000)

3-200 DEFINITIONS

3-201 Cancelled Application: Any application which has been withdrawn by the applicant or cancelled by the APCO for failure to pay fees or to provide the information requested to make an application complete.

(Amended 6/4/86; 4/6/88)

3-202 Gasoline Dispensing Facility: Any stationary facility which dispenses gasoline directly into the fuel tanks of vehicles, such as motor vehicles, aircraft or boats. The facility shall be treated as a single source which includes all necessary equipment for the exclusive use of the facility, such as nozzles, dispensers, pumps, vapor return lines, plumbing and storage tanks.

(Amended February 20, 1985)

3-203 Filing Fee: A fixed fee for each source in an authority to construct.

(Amended June 4, 1986)

3-204 Initial Fee: The fee required for each new or modified source based on the type and size of the source. The fee is applicable to new and modified sources seeking to

obtain an authority to construct. Operation of a new or modified source is not allowed until the permit to operate fee is paid.

(Amended June 4, 1986)

- 3-205 Authority to Construct:** Written authorization from the APCO, pursuant to Section 2-1-301, for a source to be constructed or modified or for a source whose emissions will be reduced by the construction or modification of an abatement device.

(Amended June 4, 1986)

- 3-206 Modification:** See Section 1-217 of Regulation 1.

- 3-207 Permit to Operate Fee:** The fee required for the annual renewal of a permit to operate or for the first year of operation (or prorated portion thereof) of a new or modified source which received an authority to construct.

(Amended 6/4/86; 7/15/87; 12/2/98; 6/7/00)

- 3-208 Deleted June 4, 1986**

- 3-209 Small Business:** A business with no more than 10 employees and gross annual income of no more than \$500,000 that is not an affiliate of a non-small business.

(Amended 6/4/86; 6/6/90; 6/7/00)

- 3-210 Solvent Evaporating Source:** Any source utilizing organic solvent, as part of a process in which evaporation of the solvent is a necessary step. Such processes include, but are not limited to, solvent cleaning operations, painting and surface coating, rotogravure coating and printing, flexographic printing, adhesive laminating, etc. Manufacture or mixing of solvents or surface coatings is not included.

(Amended July 3, 1991)

- 3-211 Source:** See Section 1-227 of Regulation 1.

- 3-212 Deleted August 2, 1995**

- 3-213 Major Stationary Source:** For the purpose of Schedule M, a major stationary source shall be any District permitted plant, building, structure, stationary facility or group of facilities under the same ownership, leasehold, or operator which, in the base calendar year, emitted to the atmosphere organic compounds, oxides of nitrogen (expressed as nitrogen dioxide), oxides of sulfur (expressed as sulfur dioxide), or PM₁₀ in an amount calculated by the APCO equal to or exceeding 50 tons per year.

(Adopted 11/2/83; Amended 2/21/90; 6/6/90; 8/2/95; 6/7/00)

- 3-214 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-215 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-216 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-217 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-218 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-219 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-220 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-221 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-222 Deleted effective March 1, 2000**

(Amended 10/20/99)

- 3-223 Start-up Date:** Date when new or modified equipment under an authority to construct begins operating. The holder of an authority to construct is required to notify the APCO of this date at least 3 days in advance. For new sources, or modified sources whose authorities to construct have expired, operating fees are charged from the startup date.

(Adopted 6/4/86; Amended 6/6/90)

- 3-224 Permit to Operate:** Written authorization from the APCO pursuant to Section 2-1-302.

(Adopted 6/4/86; Amended 6/7/00)

- 3-225 Minor Modification:** Any physical change or alteration to a source listed on Schedules G-3 or G-4 that will not increase emissions of any air contaminant. Such modifications may include alterations to improve energy and operational efficiency and those that reduce emissions. Alterations to increase actual or maximum production capacity shall not be considered minor modifications. Final determination of the applicability of this section shall be made by the APCO.

(Adopted June 6, 1990)

- 3-226 Air Toxics "Hot Spots" Information and Assessment Act of 1987:** The Air Toxics "Hot Spots" Information and Assessment Act of 1987 directs the California Air Resources Board and the Air Quality Management Districts to collect information

from industry on emissions of potentially toxic air pollutants and to inform the public about such emissions and their impact on public health. It also directs the Air Quality Management District to collect fees sufficient to cover the necessary state and District costs of implementing the program.

(Adopted October 21, 1992)

- 3-227 Toxic Air Pollutant:** For the purpose of this fee regulation, a "toxic air pollutant" is any air pollutant that is included in the District's list of Toxic Air Pollutants and Emission Weighting Factors (Schedule N).

(Adopted October 21, 1992)

3-228 Deleted December 2, 1998

3-229 Deleted December 2, 1998

3-230 Deleted December 2, 1998

3-231 Deleted December 2, 1998

3-232 Deleted December 2, 1998

3-233 Deleted December 2, 1998

3-234 Deleted December 2, 1998

3-235 Deleted December 2, 1998

3-236 Deleted December 2, 1998

3-237 PM₁₀: See Section 2-1-229 of Regulation 2, Rule 1.

(Adopted June 7, 2000)

3-300 STANDARDS

- 3-301 Hearing Board Fees:** Applicants for variances or appeals or those seeking to revoke or modify variances or abatement orders or to rehear a Hearing Board decision shall pay the applicable fees, including excess emission fees, set forth in Schedule A.

(Amended June 7, 2000)

- 3-302 Fees for New and Modified Sources:** Applicants for authorities to construct and permits to operate new sources shall pay a filing fee of \$254 per source plus the initial fee and the permit to operate fee given in Schedules B, C, D, E, F, H, I or K. Applicants for authorities to construct and permits to operate modified sources shall pay a filing fee of \$254 per source plus the initial fee and any incremental increase in permit to operate fees given in Schedules B, C, D, E, F, H, I or K. Where more than one of the schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. Except for sources covered by Schedules D.1. and H, the size to be used for a source when applying the schedules shall be the maximum size the source will have after the construction or modification.

302.1 An applicant who qualifies as a small business shall pay one half of the filing fee and, if the source falls under schedules B, C, D.3, E, F, H, I or K, one half of the initial fee and the full permit to operate fee. If the source falls under schedule D.1, the applicant shall pay the full filing fee, the full initial fee and the permit to operate fee.

302.2 Deleted July 3, 1991

302.3 Applicants for an authority to construct and permit to operate abatement devices where there is no other modification to the source shall pay a \$254 filing fee and an initial fee equivalent to 50% of the initial fee for the source being abated. For abatement devices abating more than one source, the initial fee shall be 50% of the initial fee for the source having the highest initial fee.

302.4 Applicants for a Permit to Operate reactivated, previously permitted equipment shall pay the full filing, initial, and permit fees.

302.5 Applicants for minor modifications to permitted sources subject to Schedules G-3 or G-4 shall pay filing fees and the initial and permit to operate fees specified under Schedule G-2. Permit renewal fees will continue to be charged under Schedules G-3 and G-4.

(Amended 5/19/82; 7/6/83; 6/4/86; 7/15/87; 6/6/90; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03)

- 3-303 Back Fees:** An applicant required to obtain a permit to operate existing equipment in

accordance with District regulations shall pay back fees equal to the permit to operate fees given in the appropriate Schedule (B, C, D, E, F, H, I or K) prorated from the effective date of permit requirements. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. The maximum back fee shall not exceed five years' permit fees.

(Amended 5/19/82; 7/6/83; 6/4/86; 7/15/87, 6/6/90; 7/3/91; 10/8/97)

- 3-304 Replacement:** Applicants who are replacing sources with identical equipment shall pay only the filing fee. An application for replacement of components with non-identical components shall pay fees for a change in conditions. Applicants who are replacing sources or equipment with non-identical equipment will pay the filing fee plus the initial fee and the permit to operate fee.

(Amended 6/4/86; 11/15/00)

- 3-305 Cancellation or Withdrawal:** There will be no refund of initial and filing fees if an application is cancelled or withdrawn. However, if an application for identical equipment is submitted within six months of the date of cancellation or withdrawal, the initial fee will be credited in full against the fee for the new application.

(Amended 7/6/83; 4/6/88; 10/8/97)

- 3-306 Change in Conditions:** If an applicant applies to change the conditions on an existing authority to construct or permit to operate, the applicant will pay the following fees. There will be no change in anniversary date.

306.1 Administrative Condition Changes: An applicant applying for an administrative change in permit conditions shall pay a fee equal to the filing fee for a single source, provided the following criteria are met:

- 1.1 The condition change applies to a single source or a group of sources with shared permit conditions.
- 1.2 The condition change does not subject the source(s) to any District Regulations or requirements that were not previously applicable.
- 1.3 The condition change does not result in any increase in emissions of POC, NPOC, NO_x, CO, SO₂, or PM₁₀ at any source or the emission of a toxic air contaminant above the trigger levels identified in Regulation 2, Rule 1, Table 2-1-316.
- 1.4 The condition change does not require a public notice.

306.2 Other Condition Changes: Applicant shall pay the filing and initial fees required for new and modified equipment under Section 3-302. If the condition change will result in higher permit to operate fees, the applicant shall also pay any incremental increases in permit to operate fees.

(Amended 7/6/83; 6/4/86; 6/6/90; 10/8/97; 6/7/00)

- 3-307 Transfers:** The owner/operator of record is the person to whom a permit is issued or, if no permit has yet been issued to a facility, the person who applied for a permit. Permits are valid only for the owner/operator of record. Permits are re-issued to the new owner/operator of record with no change in expiration dates. An applicant for a transfer of a permit to operate shall pay a fee of \$51 per permit up to a maximum of \$1016 for a facility. An applicant who qualifies as a small business shall pay a fee of \$25.50 per permit up to a maximum of \$508 for a facility.

(Amended 2/20/85; 6/4/86; 11/5/86; 4/6/88; 10/8/97, 5/1/02; 5/21/03)

- 3-308 Change of Location:** An applicant who wishes to move an existing source which has a permit to operate shall pay no fee if the move is on the same facility. The applicant shall pay the filing fee, the initial fee and permit to operate fee if the move is not on the same facility.

(Amended 7/6/83; 6/4/86)

- 3-309 Duplicate Permit:** An applicant for a duplicate permit to operate shall pay a fee of \$51 per permit.

(Amended 5/19/99, 5/1/02; 5/21/03)

- 3-310 Fee for Constructing Without a Permit:** An applicant for an authority to construct and a permit to operate a source which has been constructed without an authority to construct shall pay the following fees:

310.1 Sources subject to permit requirements on the date of initial operation shall pay fees for new construction pursuant to Section 3-302, any back fees pursuant to Section 3-303 and a late fee equal to 100% of the initial fee. A

source falling under Schedule D.1 that is not required to pay an initial fee shall pay a fee equal to 100% of the filing fee.

310.2 Sources previously exempt from permit requirements which lose their exemption due to changes in District, state, or federal regulations shall pay a permit to operate fee for the coming year and any back fees pursuant to Section 3-303.

310.3 Sources previously exempt from permit requirements which lose their exemption due to a change in the manner or mode of operation, such as an increased throughput, shall pay fees for new construction pursuant to Section 3-302. In addition, sources applying for permits after commencing operation in a non-exempt mode shall also pay a late fee equal to 100% of the initial fee and any back fees pursuant to Section 3-303.

(Amended 7/6/83; 4/18/84; 6/4/86; 6/6/90; 7/3/91; 8/2/95; 10/8/97)

3-311 Banking: Any applicant who wishes to bank emissions for future use, or convert an ERC into an IERC, shall pay a filing fee of \$254 per source plus the initial fee given in Schedules B, C, D, E, F, H, I or K. Where more than one of these schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. Any applicant for the withdrawal of banked emissions shall pay a fee of \$254.

(Amended 7/6/83; 6/4/86; 7/15/87; 7/3/91; 6/15/94; 7/1/98; 5/19/99; 6/7/00; 6/6/01; 5/1/02; 5/21/03)

3-312 Emission Caps and Alternative Compliance Plans: Any facility which elects to use an alternative compliance plan contained in:

312.1 Regulation 8 ("bubble") to comply with a District emission limitation or to use an annual or monthly emission limit to acquire a permit in accordance with the provisions of Regulation 2, Rule 2, shall pay an additional annual fee equal to fifteen percent of the total plant permit to operate fee.

312.2 Regulation 2, Rule 9 shall pay an annual fee of \$642 for each source included in the alternative compliance plan, not to exceed \$6420.

(Adopted 5/19/82; Amended 6/4/86; 5/19/99; 6/7/00; 6/6/01; 5/1/02; 5/21/03)

3-313 Deleted May 19, 1999

3-314 Deleted August 2, 1995

3-315 Costs of Environmental Documentation: An applicant for an Authority to Construct a project which is subject to review under the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) shall pay, in addition to the fees required under Section 3-302 and in any applicable schedule, the District's costs of performing all environmental evaluation required pursuant to the California Environmental Quality Act, the District's costs in preparing any environmental study or Environmental Impact Report (including the costs of any outside consulting assistance which the District may employ in connection with the preparation of any such study or report), as well as the District's reasonable internal costs (including overhead) of processing and reviewing the required environmental documentation.

(Adopted 12/18/85; Amended 5/1/02)

3-316 Deleted June 6, 1990

3-317 Asbestos Operation Fees: After July 1, 1988, persons submitting a written plan, as required by Regulation 11, Rule 2, Section 401, to conduct an asbestos operation shall pay the fee given in Schedule L.

(Adopted 7/6/88; Renumbered 9/7/88; Amended 8/2/95)

3-318 Public Notice Fee, Schools: Pursuant to Section 42301.6(b) of the Health and Safety Code, an applicant for an authority to construct or permit to operate subject to the public notice requirements of Regulation 2-1-412 shall pay, in addition to the fees required under Section 3-302 and in any applicable schedule;

318.1 A minimum fee of \$914 per application, and

318.2 The District's cost exceeding \$914 of preparing and distributing the public notice to the affected persons specified in Regulation 2-1-412.

(Adopted 11/1/89; Amended 10/8/97; 7/1/98; 5/19/99; 6/7/00; 5/21/03)

3-319 Major Stationary Source Fees: Any major stationary source emitting 50 tons per year of organic compounds, sulfur oxides, nitrogen oxides, or PM₁₀ shall pay a fee based on Schedule M. This fee is in addition to permit and other fees otherwise authorized to be collected from such facilities and shall be included as part of the annual permit renewal fees.

(Adopted 6/6/90; Amended 8/2/95; 6/7/00)

3-320 Toxic Inventory Fees: Any stationary source that emits one or more potentially toxic air pollutants (listed in Schedule N) in quantities above a minimum threshold level shall pay an annual fee based on Schedule N. This fee will be in addition to permit to operate and other fees otherwise authorized to be collected from such facilities.

320.1 An applicant who qualifies as a small business under Regulation 3-209 shall pay a Toxic Inventory Fee as set out in Schedule N up to a maximum fee of \$5,842 per year.

(Adopted 10/21/92; Amended 5/19/99; 5/21/03)

3-321 Deleted December 2, 1998

3-322 Excavation of Contaminated Soil and Removal of Underground Storage Tank Operation Fees: Persons submitting a written notification for a given site to conduct either excavation of contaminated soil or removal of underground storage tanks as required by Regulation 8, Rule 40, Section 401, 402, 403 or 405 shall pay a fee based on Schedule Q.

(Adopted 1/5/94; Amended 8/2/95; 5/21/03)

3-323 Pre-Certification Fees: An applicant seeking to pre-certify a source, in accordance with Regulation 2, Rule 1, Section 415, shall pay the filing fee, initial fee and permit to operate fee given in the appropriate schedule.

(Adopted June 7, 1995)

3-324 Deleted June 7, 2000

3-325 Deleted December 2, 1998

3-326 Deleted December 2, 1998

3-327 Permit to Operate, Renewal Fees: After the expiration of the initial permit to operate, the permit to operate shall be renewed on an annual basis. The fee required for the annual renewal of a permit to operate is the permit to operate fee listed in Schedules B, C, D, E, F, H, I and K. Where more than one of the schedules is applicable to a source, the fee paid shall be the highest of the applicable schedules. This annual renewal fee is applicable to all sources required to obtain permits to operate in accordance with District regulations.

(Adopted June 7, 2000)

3-328 Fee for OEHHHA Risk Assessment Reviews: Any facility that submits a health risk assessment to the District in accordance with Section 44361 of the California Health and Safety Code shall pay any fee requested by the State Office of Environmental Health Hazard Assessment (OEHHHA) for reimbursement of that agency's costs incurred in reviewing the risk assessment.

(Adopted June 7, 2000)

3-400 ADMINISTRATIVE REQUIREMENTS

3-401 Permits: Definitions, standards, and conditions contained in Regulation 2, Permits, are applicable to this regulation.

3-402 Single Anniversary Date: The APCO may assign a single anniversary date to a facility on which all its renewable permits to operate expire and will require renewal. Fees will be prorated to compensate for different time periods resulting from change in anniversary date.

3-403 Change in Operating Parameters: See Section 2-1-404 of Regulation 2, Rule 1.

3-404 Deleted June 7, 2000

3-405 Fees Not Paid: If an applicant or owner/operator fails to pay the fees specified on the invoice by the due date, the following procedure(s) shall apply:

405.1 **Authority to Construct:** The application will be cancelled, but can be reactivated upon payment of fees.

405.2 **New Permit to Operate:** The Permit to Operate shall not be issued, and the facility will be notified that operation, including startup, is not authorized.

2.1 Fees received during the first 30 days following the due date must include an additional late fee equal to 50 percent of an annual Permit to Operate Fee.

2.2 Fees received more than 30 days after the due date must include an additional late fee equal to 100 percent of an annual Permit to Operate

Fee.

405.3 **Renewal of Permit to Operate:** The facility will be notified that the permit has lapsed and that further operation is no longer authorized. Reinstatement of lapsed Permits to Operate will require the payment of reinstatement fees in addition to the Permit to Operate Fee. Permit to Operate Fees shall be calculated using fee schedules in effect at either the time of reinstatement or at the time additional fees are assessed under subsection 3-405.2.

3.1 Fees received during the first 30 days following the due date must include the Permit to Operate Fee for the period covered on the invoice plus a reinstatement fee equal to 50 percent of the annual Permit to Operate Fee.

3.2 Fees received more than 30 days after the due date, but less than one year after the due date, must include the Permit to Operate Fee for the period covered by the invoice plus a reinstatement fee equal to 100 percent of the annual Permit to Operate Fee.

3.3 Fees received more than one year after the due date must include the Permit to Operate Fee, prorated from the date the permit expired to the current permit anniversary date, plus a reinstatement fee equal to 150 percent of the annual Permit to Operate Fee.

405.4 **Other Fees:** Persons who have not paid the fee by the invoice due date, shall pay a late fee in addition to the original invoiced fee. Fees shall be calculated using fee schedules in effect at the time of the fees' original determination.

4.1 Fees received more than 30 days after the invoice due date must include a late fee of 10 percent of the original invoiced fee.

(Amended 7/6/83; 6/4/86; 11/5/86; 2/15/89; 6/6/90; 7/3/91; 8/2/95; 12/2/98)

3-406 **Deleted June 4, 1986**

3-407 **Deleted August 2, 1995**

3-408 **Permit to Operate Valid for 12 Months:** A Permit to Operate is valid for 12 months from the date of issuance or other time period as approved by the APCO.

(Amended 6/4/86; Amended 6/7/00)

3-409 **Deleted June 7, 2000**

3-410 **Deleted August 2, 1995**

3-411 **Advance Deposit of Funds:** The APCO may require that at the time of the filing of an application for an Authority to Construct for a project for which the District is a lead agency under the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.), the applicant shall make an advance deposit of funds, in an amount to be specified by the APCO, to cover the costs which the District estimates to incur in connection with the District's performance of its environmental evaluation and the preparation of any required environmental documentation. In the event the APCO requires such an estimated advance payment to be made, the applicant will be provided with a full accounting of the costs actually incurred by the District in connection with the District's performance of its environmental evaluation and the preparation of any required environmental documentation.

(Adopted 12/18/85; Amended 8/2/95)

3-412 **Deleted December 2, 1998**

3-413 **Toxic "Hot Spots" Information and Assessment Act Revenues:** No later than 120 days after the adoption of this regulation, the APCO shall transmit to the California Air Resources Board, for deposit into the Air Toxics "Hot Spots" Information and Assessment Fund, the revenues determined by the ARB to be the District's share of statewide Air Toxics "Hot Spot" Information and Assessment Act expenses.

(Adopted October 21, 1992)

3-414 **Deleted December 2, 1998**

3-415 **Failure to Pay - Further Actions:** When an applicant or owner/operator fails to pay the fees specified on the invoice by the due date, the APCO may take the following actions against the applicant or owner/operator:

415.1 Issuance of a Notice to Comply.

415.2 Issuance of a Notice of Violation.

415.3 Revocation of an existing Permit to Operate. The APCO shall initiate proceedings to revoke permits to operate for any person whose for more than one month. The revocation process shall continue until payment in full is made or until permits are revoked.

415.4 The withholding of any other District services as deemed appropriate until payment in full is made.

(Adopted 8/2/95; Amended 12/2/98)

3-416

Adjustment of Fees: The APCO or designees may, upon finding administrative error by District staff in the calculation, imposition, noticing, invoicing, and/or collection of any fee set forth in this rule, rescind, reduce, increase, or modify the fee. A request for such relief from an administrative error, accompanied by a statement of why such relief should be granted, must be received within two years from the date of payment.

(Adopted October 8, 1997)

**SCHEDULE A
HEARING BOARD FEES¹**

Established by the Board of Directors December 7, 1977 Resolution No. 1046
(Code section references are to the California Health & Safety Code, unless otherwise indicated)

		Large Companies	Small Business	Third Party
1.	For each application for variance exceeding 90 days, in accordance with §42350, including applications on behalf of a class of applicants, which meet the requirements of the Hearing Board Rules for a valid and proper class action for variance Plus, for each hearing in addition to the first hearing necessary to dispose of said variance application in accordance with §42350, the additional sum of	\$1118 \$559	\$167 \$56	
2.	For each application for variance not exceeding 90 days, in accordance with §42350, including applications on behalf of a class of applicants, which meet the requirements of the Hearing Board Rules for a valid and proper class action for variance Plus, for each hearing in addition to the first hearing necessary to dispose of said variance application, in accordance with §42350, the additional sum of	\$671 \$335	\$167 \$56	
3.	For each application to modify a variance in accordance with §42356 ... Plus, for each hearing in addition to the first hearing on said application to modify a variance, in accordance with §42345, necessary to dispose of the application, the additional sum of.....	\$447 \$335	\$56 \$56	
4.	For each application to extend a variance, in accordance with §42357 .. Plus, for each hearing in addition to the first hearing on an application to extend a variance, in accordance with §42357, necessary to dispose of the application, the additional sum of.....	\$447 \$335	\$56 \$56	
5.	For each application to revoke a variance	\$671	\$56	
6.	For each application for approval of a Schedule of Increments of Progress in accordance with §41703	\$447	\$56	
7.	For each application for variance in accordance with §41703, which exceeds 90 days Plus, for each hearing in addition to the first hearing on said application for variance in accordance with §41703, the additional sum of	\$1118 \$569	\$167 \$56	
8.	For each application for variance in accordance with §41703, not to exceed 90 days Plus, for each hearing in addition to the hearing on said application for a variance in accordance with §41703, the additional sum of	\$671 \$335	\$167 \$56	
9.	For each Appeal (Permit, Banking, Title V).....	\$1118 per hearing day	\$559 per hearing day	\$559 for entire appeal period
10.	For each application for intervention in accordance with Hearing Board Rules §§2.3, 3.46 & 4.6.....	\$559	\$112	
11.	For each application to Modify or Terminate an abatement order	\$1118 per hearing day	\$559 per hearing day	
12.	For each application for an interim variance in accordance with §42351	\$559	\$112	
13.	For each application for an emergency variance in accordance with §42359.5.....	\$279	\$56	

		Large Companies	Small Business	Third Party
14.	For each application to rehear a Hearing Board decision in accordance with §40861	100% of previous fee charged	100% of previous fee charged	
15.	Excess emission fees	See Attachment I	See Attachment I	
16.	Miscellaneous filing fee for any hearing not covered above	\$559	\$167	\$167
17.	For each published Notice of Public Hearing	Cost of Publication	\$0	\$0
18.	Court Reporter Fee <u>(to be paid only if Court Reporter required for hearing)</u>	\$112 or cost per day if hearing solely dedicated to one Docket	\$0	\$0

NOTE 1 Any person who certifies under penalty of perjury that payment of the foregoing fees will cause an unreasonable hardship, may be excused from the payment of fees by order of the Hearing Board on that account.

(Amended 10/8/97; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03)

**SCHEDULE A
ATTACHMENT I
EXCESS EMISSION FEE**

A. General

- (1) Each applicant or petitioner for a variance from these Rules and Regulations shall pay to the Clerk or Deputy Clerk of the Hearing Board, in addition to the other filing fees required in Schedule A, an emission fee based on the total weight of emissions discharged, per source or product, other than those described in division (B) below, during the variance period in excess of that allowed by these rules in accordance with the schedule set forth in Table I.
- (2) Where the total weight of emission discharged cannot be easily calculated, the petitioner shall work in concert with District staff to establish the amount of excess emissions to be paid.
- (3) In the event that more than one rule limiting the discharge of the same contaminant is violated, the excess emission fee shall consist of the fee for violation which will result in the payment of the greatest sum. For the purposes of this subdivision, opacity rules and particulate mass emissions shall not be considered rules limiting the discharge of the same contaminant.

B. Excess Visible Emission Fee

Each applicant or petitioner for a variance from Regulation 6 or Health and Safety Code Section 41701 shall pay to the Clerk or Deputy Clerk of the Hearing Board, in addition to the filing fees required in Schedule A and the excess emission fees required in (A) above (if any), an emission fee based on the difference between the percent opacity allowed by Regulation 6 and the percent opacity of the emissions allowed from the source or sources operating under the variance, in accordance with the schedule set forth in Table II.

In the event that an applicant or petitioner is exempt from the provisions of Regulation 6, the applicant or petitioner shall pay a fee calculated as described herein above, but such fee shall be calculated based upon the difference between the opacity allowed under the variance and the opacity allowed under the provisions of Health and Safety Code Section 41701, in accordance with the schedule set forth in Table II.

C. Applicability

The provisions of subdivision (A) shall apply to all variances that generate excess emissions.

D. Fee Determination

- (1) The excess emission fees shall be calculated by the petitioner based upon the requested number of days of operation under variance multiplied by the expected excess emissions as set forth in subdivisions (A) and (B) above. The calculations and proposed fees shall be set forth in the petition.
- (2) The Hearing Board may adjust the excess emission fee required by subdivisions (A) and (B) of this rule based on evidence regarding emissions presented at the time of the hearing.

E. Small Businesses

- (1) A small business shall be assessed twenty percent (20%) of the fees required by subdivisions (A) and (B), whichever is applicable. "Small business" is defined in the Fee Regulation.
- (2) Request for exception as a small business shall be made by the petitioner under penalty of perjury on a declaration form provided by the Executive Officer which shall be submitted to the Clerk or Deputy Clerk of the Hearing Board at the time of filing a petition for variance.

F. Group, Class and Product Variance Fees

Each petitioner included in a petition for a group, class or product variance shall pay the filing fee specified in Schedule A, and the excess emission fees specified in subdivisions (A) and (B), whichever is applicable.

G. Adjustment of Fees

If after the term of a variance for which emission fees have been paid, petitioner can establish, to the satisfaction of the Executive Officer/APCO, that emissions were actually less than those upon which the fee was based, a pro rata refund shall be made.

H. Fee Payment/Variance Invalidation

- (1) Excess emission fees required by subdivisions (A) and (B), based on an estimate provided during the variance Hearing, are due and payable within fifteen (15) days of the granting of the variance. The petitioner shall be notified in writing of any adjustment to the amount of excess emission fees due, following District staff's verification of the estimated emissions. Fee payments to be made as a result of an adjustment are due and payable within fifteen (15) days of notification of the amount due.
- (2) Failure to pay the excess emission fees required by subdivisions (A) and (B) within fifteen (15) days of notification that a fee is due shall automatically invalidate the variance. Such notification may be given by personal service or by deposit, postpaid, in the United States mail and shall be due fifteen (15) days from the date of personal service or mailing. For the purpose of this rule, the fee payment shall be considered to be received by the District if it is postmarked by the United States Postal Service on or before the expiration date stated on the billing notice. If the expiration date falls on a Saturday, Sunday, or a state holiday, the fee payment may be postmarked on the next business day following the Saturday, Sunday, or the state holiday with the same effect as if it had been postmarked on the expiration date.

**TABLE I
SCHEDULE OF EXCESS EMISSIONS FEES**

Air Contaminants	All at \$1.07 Per Pound
Organic gases, except methane and those containing sulfur	
Carbon Monoxide	
Oxides of nitrogen (expressed as nitrogen dioxide)	
Gaseous sulfur compounds (expressed as sulfur dioxide)	
Particulate matter	
Toxic Air Contaminants	All at \$5.33 Per Pound
Asbestos	
Benzene	
Cadmium	
Carbon tetrachloride	
Chlorinated dioxins and dibenzofurans (15 species)	
Ethylene dibromide	
Ethylene dichloride	
Ethylene oxide	
Formaldehyde	
Hexavalent chromium	
Methylene chloride	
Nickel	
Perchloroethylene	
1,3-Butadiene	
Inorganic arsenic	
Beryllium	
Polynuclear aromatic hydrocarbons (PAH)	
Vinyl chloride	
Lead	
1,4-Dioxane	
Trichloroethylene	

**TABLE II
SCHEDULE OF EXCESS VISIBLE EMISSION FEE**

For each source with opacity emissions in excess of twenty percent (20%), but less than forty percent (40%) (where the source is in violation of Regulation 6, the fee is calculated as follows:

$$\text{Fee} = (\text{Opacity} \times \text{equivalent} - 20) \times \text{number of days allowed in variance} \times \$1.20$$

For each source with opacity emissions in excess of forty percent (40%) (where the source is in violation of Regulation 6 and California Health and Safety Code Section 41701), the fee is calculated as follows:

$$\text{Fee} = (\text{Opacity} \times \text{equivalent} - 40) \times \text{number of days allowed by variance} \times \$1.20$$

- * Where "Opacity" equals maximum opacity of emissions in percent (not decimal equivalent) allowed by the variance. Where the emissions are darker than the degree of darkness equivalent to the allowed Ringelmann number, the percentage equivalent of the excess degree of darkness shall be used as "opacity."

(Adopted 6/7/00; Amended 5/1/02; 5/21/03)

SCHEDULE B
COMBUSTION OF FUEL
(Adopted June 18, 1980)

For each source that burns fuel, which is not a flare, and which is not exempted by Regulation 2, Rule 1, the fee shall be computed based on the maximum gross combustion capacity of the source.

1. INITIAL FEE: \$33.52 per MM BTU/HOUR
 - a. All ratings rounded to the nearest MM BTU/Hr
 - b. The minimum fee per source is: \$179
 - c. The maximum fee per source is: \$62,545
2. PERMIT TO OPERATE FEE: \$16.76 per MM BTU/HOUR
 - a. All ratings rounded to the nearest MM BTU/HR
 - b. The minimum fee per source is: \$128
 - c. The maximum fee per source is: \$31,272
3. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.
4. Toxic Surcharge Fee: The initial fee shall be doubled and the permit to operate fee shall be raised by ten percent, for sources which emit one or more toxic air contaminant (TAC), identified by the Air Resources Board, at a rate which exceeds the trigger levels listed in Table 2-1-316 of Regulation 2, Rule 1. This fee shall not be assessed for TACs not listed in Table 2-1-316.
5. Applicants for an authority to construct and permit to operate a project, which burns municipal waste or refuse-derived fuel, shall pay in addition to all required fees, an additional fee to cover the costs incurred by the State Department of Health Services, and/or a qualified contractor designated by the State Department of Health Services, in reviewing a risk assessment as required under H&S Code Section 42315. The fee shall be transmitted by the District to the Department of Health Services and/or the qualified contractor upon completion of the review and submission of comments in writing to the District.
6. A surcharge equal to 100% of all required initial and permit to operate fees shall be charged for sources permitted to burn one or more of the following fuels: coke, coal, wood, tires, black liquor, and municipal solid waste.

NOTE: MM BTU is million BTU

One MM BTU/HR = 1.06 gigajoules/HR

(Amended 6/5/85; 6/4/86; 3/4/87; 6/6/90; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03)

SCHEDULE C
STATIONARY CONTAINERS FOR THE STORAGE OF
ORGANIC LIQUIDS
(Adopted June 18, 1980)

For each stationary container of organic liquids which is not exempted from permits by Regulation 2 and which is not part of a gasoline dispensing facility, the fee shall be computed based on the container volume, as follows:

1. INITIAL FEE: 0.160 cents per gallon
 - a. The minimum fee per source is: \$179
 - b. The maximum fee per source is: \$24,343
2. PERMIT TO OPERATE FEE: 0.081 cents per gallon
 - a. The minimum fee per source is: \$128
 - b. The maximum fee per source is: \$12,172
3. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.
4. Toxic Surcharge Fee: The initial fee shall be doubled and the permit to operate fee shall be raised by ten percent, for sources which emit one or more toxic air contaminant (TAC), identified by the Air Resources Board, at a rate which exceeds the trigger levels listed in Table 2-1-316 of Regulation 2, Rule 1. This fee shall not be assessed for TACs not listed in Table 2-1-316.

(Amended 2/20/85; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 7/1/98; 5/19/99; 6/7/00; 6/6/01; 5/1/02; 5/21/03)

SCHEDULE D
GASOLINE TRANSFER AT GASOLINE DISPENSING
FACILITIES,
BULK PLANTS AND TERMINALS
(Adopted June 18, 1980)

1. All gasoline dispensing facilities shall pay the following fees:

- a. INITIAL FEE: \$81.00 per single product nozzle (spn)
\$81.00 per product for each multi-product nozzle (mpn)
- b. PERMIT TO OPERATE FEE: \$31.00 per single product nozzle (spn)
\$31.00 per product for each multi-product nozzle (mpn)

Modifications at a currently permitted gasoline dispensing facility shall pay the following fees with no change to the facilities' expiration date:

- c. MODIFICATION FEE:
$$\$112.25 \times \{[(mpn_{\text{proposed}})(\text{products per nozzle}) + spn_{\text{proposed}}] - [(mpn_{\text{existing}})(\text{products per nozzle}) + spn_{\text{existing}}]\}$$

mpn = multi-product nozzles
spn = single product nozzles

If the above formula yields zero or negative results, no modification fee shall be charged. These projects shall pay a filing fee only.

For the purposes of calculating the above fees, a fuel blended from two or more different grades shall be considered a separate product.

Other modifications to facilities' equipment, including but not limited to tank addition/replacement/conversion, vapor recovery piping replacement, moving or extending pump islands, will pay a filing fee only.

- 2. Nozzles used exclusively for the delivery of diesel fuel or other fuels exempt from permits shall pay no fee. Multi-product nozzles used to deliver both exempt and non-exempt fuels shall pay fees for the non-exempt products only.
- 3. All bulk plants, terminals or other facilities using loading racks to transfer gasoline or gasohol into trucks, railcars or ships shall pay the following fees:
 - a. INITIAL FEE: \$1,064 per single product loading arm
\$1,064 per product for multi-product arms
 - b. PERMIT TO OPERATE FEE: \$297 per single product loading arm
\$297 per product for multi-product arms
- 4. Fees in (1) above are in lieu of tank fees. Fees in (3) above are in addition to tank fees.
- 5. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.
- 6. The initial fee and the permit to operate fee have been raised for the above sources that emit benzene, a toxic air contaminant identified by the Air Resources Board.
(Amended 2/20/85; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02; 5/21/03)

SCHEDULE E
SOLVENT EVAPORATING SOURCES
(Adopted June 18, 1980)

For each solvent evaporating source, as defined in Section 3-210 except for dry cleaners, the fee shall be computed based on the net amount of organic solvent processed through the sources on an annual basis (or anticipated to be processed, for new sources) including solvent used for the cleaning of the sources.

1. INITIAL FEE:
 - a. The minimum fee per source is: \$179
 - b. If usage is not more than 1,000 gallons/year: \$179
 - c. If usage is more than 1,000 gallons/year: \$358 per 1,000 gallons
 - d. The maximum fee per source is: \$14,240

2. PERMIT TO OPERATE FEE:
 - a. The minimum fee per source is: \$128
 - b. If usage is not more than 1,000 gallons/year: \$128
 - c. If usage is more than 1,000 gallons/year: \$179 per 1,000 gallons
 - d. The maximum fee per source is: \$7,120

3. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.

4. Toxic Surcharge Fee: The initial fee shall be doubled and the permit to operate fee shall be raised by ten percent, for sources which emit one or more toxic air contaminant (TAC), identified by the Air Resources Board, at a rate which exceeds the trigger levels listed in Table 2-1-316 of Regulation 2, Rule 1. This fee shall not be assessed for TACs not listed in Table 2-1-316.

*(Amended 5/19/82; 10/17/84; 6/5/85; 6/4/86; 10/8/87;
7/3/91; 6/15/94; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03)*

SCHEDULE F
MISCELLANEOUS SOURCES
(Adopted June 18, 1980)

For each source not governed by Schedules B, C, D, E, H or I, the initial fee is \$179 and the permit to operate fee is \$128, except for those sources in the special classification lists below:

List of special classifications requiring graduated fees is shown in Schedules G-1, G-2, G-3, and G-4.

1. FEE FOR SCHEDULE G-1
 - a. The initial fee is: \$1,067
 - b. The permit to operate fee is: \$533
2. FEE FOR SCHEDULE G-2
 - a. The initial fee is: \$2,134
 - b. The permit to operate fee is: \$1,067
3. FEE FOR SCHEDULE G-3
 - a. The initial fee is: \$16,256
 - b. The permit to operate fee is: \$8,128
4. FEE FOR SCHEDULE G-4
 - a. The initial fee is: \$46,452
 - b. The permit to operate fee is: \$23,226
5. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.
6. Toxic Surcharge Fee: The initial fee shall be doubled and the permit to operate fee shall be raised by ten percent, for sources which emit one or more toxic air contaminant (TAC), identified by the Air Resources Board, at a rate which exceeds the trigger levels listed in Table 2-1-316 of Regulation 2, Rule 1. This fee shall not be assessed for TACs not listed in Table 2-1-316.

(Amended 5/19/82; 6/5/85; 6/4/86; 6/6/90; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03)

SCHEDULE G-1
(Adopted June 18, 1980)

Equipment or Process Description	Materials Processed or Produced
Asphalt Roofing Manufacturing – Asphalt Dipping	Asphalt Roofing or Related Materials
Calcining Kilns, excluding those processing cement, lime, or coke (see G-4 for cement, lime, or coke Calcining Kilns)	Any Materials except cement, lime, or coke
Chemical Manufacturing, Inorganic – Processing Units with a Capacity of 1000 Gallons/Hour or more	Any Inorganic Materials
Chemical Manufacturing, Inorganic – Processing Units with a Capacity of 5 Tons/Hour or more	Any Inorganic Materials
Chemical Manufacturing, Inorganic – Reactors with a Capacity of 1000 Gallons or more	Any Inorganic Materials
Chemical Manufacturing, Organic - Latex Dipping	Any latex materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 1000 Gallons/Hour or more	Any Organic Materials
Chemical Manufacturing, Organic – Processing Units with a Capacity of 5 Tons/Hour or more	Any Organic Materials
Chemical Manufacturing, Organic – Reactors with a Capacity of 1000 Gallons or more	Any Organic Materials
Crushers	Any minerals or mineral products such as rock, aggregate, cement, concrete, or glass; waste products such as building or road construction debris; and any wood, wood waste, green waste; or similar materials
Electroplating Equipment	Decorative or Hard Chrome only
Foil Manufacturing – Any Converting or Rolling Lines	Any Metal or Alloy Foils
Galvanizing Equipment	Any
Glass Manufacturing – Batching Processes including storage and weigh hoppers or bins, conveyors, and elevators	Any Dry Materials
Glass Manufacturing – Mixers	Any Dry Materials
Glass Manufacturing – Molten Glass Holding Tanks	Any molten glass
Grinders	Any minerals or mineral products such as rock, aggregate,

Equipment or Process Description	Materials Processed or Produced
	cement, concrete, or glass; waste products such as building or road construction debris; and any wood, wood waste, green waste; or similar materials
Incinerators – Crematory	Human and/or animal remains
Incinerators – Flares	Any waste gases
Incinerators – Other (see G-2 for hazardous or municipal solid waste incinerators, see G-3 for medical or infectious waste incinerators)	Any Materials except hazardous wastes, municipal solid waste, medical or infectious waste
Incinerators – Pathological Waste (see G-3 for medical or infectious waste incinerators)	Pathological waste only
Loading and/or Unloading Operations – Bulk Plants and Bulk Terminals, excluding those loading gasoline or gasohol (see Schedule D for Bulk Plants and Terminals loading gasoline or gasohol)	Any Organic Materials except gasoline or gasohol
Petroleum Refining – Alkylation Units	Any Hydrocarbons
Petroleum Refining – Asphalt Oxidizers	Any Hydrocarbons
Petroleum Refining – Benzene Saturation Units/Plants	Any Hydrocarbons
Petroleum Refining – Catalytic Reforming Units	Any Hydrocarbons
Petroleum Refining – Chemical Treating Units including alkane, naphthenic acid, and naptha merox treating, or similar processes	Any Hydrocarbons
Petroleum Refining – Converting Units including Dimersol Plants, Hydrocarbon Splitters, or similar processes	Any Hydrocarbons
Petroleum Refining – Distillation Units, excluding crude oil units with capacity > 1000 barrels/hour (see G-3 for > 1000 barrels/hour crude distillation units)	Any Hydrocarbons
Petroleum Refining – Hydrogen Manufacturing	Hydrogen or Any Hydrocarbons
Petroleum Refining – Hydrotreating or Hydrofining	Any Hydrocarbons
Petroleum Refining – Isomerization	Any Hydrocarbons
Petroleum Refining – MTBE Process Units/Plants	Any Hydrocarbons
Petroleum Refining – Sludge Converter	Any Petroleum Waste Materials
Petroleum Refining – Solvent Extraction	Any Hydrocarbons
Petroleum Refining – Sour Water Stripping	Any Petroleum

Equipment or Process Description	Materials Processed or Produced
	Process or Waste Water
Petroleum Refining – Storage (enclosed)	Petroleum Coke or Coke Products
Petroleum Refining – Waste Gas Flares	Any Petroleum Refining Gases
Petroleum Refining – Miscellaneous Other Process Units	Any Hydrocarbons
Remediation Operations, Groundwater – Strippers	Contaminated Groundwater
Remediation Operations, Soil - Any Equipment	Contaminated Soil
Spray Dryers	Any Materials
Sterilization Equipment	Ethylene Oxide
Wastewater Treatment, Industrial – Oil-Water Separators, excluding oil-water separators at petroleum refineries (see G-2 for Petroleum Refining - Oil-Water Separators)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Industrial – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment and excluding strippers at petroleum refineries (see G-2 for Petroleum Refining – Strippers)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Industrial - Storage Ponds, excluding storage ponds at petroleum refineries (see G-2 for Petroleum Refining – Storage Ponds)	Wastewater from any industrial facilities except petroleum refineries
Wastewater Treatment, Municipal – Preliminary Treatment	Municipal Wastewater
Wastewater Treatment, Municipal – Primary Treatment	Municipal Wastewater
Wastewater Treatment, Municipal – Digesters	Municipal Wastewater
Wastewater Treatment, Municipal – Sludge Handling Processes, excluding sludge incinerators (see G-2 for sludge incinerators)	Sewage Sludge

(Amended 6/4/86; 6/6/90; 5/19/99; 6/7/00)

SCHEDULE G-2
(Adopted June 6, 1990)

Equipment or Process Description	Materials Processed or Produced
Asphalt Roofing Manufacturing – Asphalt Blowing	Asphalt Roofing or Related Materials
Asphaltic Concrete Manufacturing – Aggregate Dryers	Any Dry Materials
Asphaltic Concrete Manufacturing – Batch Mixers	Any Asphaltic Concrete Products
Asphaltic Concrete Manufacturing – Drum Mixers	Any Asphaltic Concrete Products
Asphaltic Concrete Manufacturing – Other Mixers and/or Dryers	Any Dry Materials or Asphaltic Concrete Products
Concrete or Cement Batching Operations – Mixers	Any cement, concrete, or stone products or similar materials
Furnaces – Electric	Any Mineral or Mineral Product
Furnaces – Electric Induction	Any Mineral or Mineral Product
Furnaces – Glass Manufacturing	Soda Lime only
Furnaces – Reverberatory	Any Ores, Minerals, Metals, Alloys, or Related Materials
Incinerators – Hazardous Waste including any unit required to have a RCRA permit	Any Liquid or Solid Hazardous Wastes
Incinerators – Solid Waste, excluding units burning human/animal remains or pathological waste exclusively (see G-1 for Crematory and Pathological Waste Incinerators)	Any Solid Waste including Sewage Sludge (except human/animal remains or pathological waste)
Metal Rolling Lines, excluding foil rolling lines (see G-1 for Foil Rolling Lines)	Any Metals or Alloys
Petroleum Refining – Stockpiles (open)	Petroleum Coke or coke products only
Petroleum Refining, Wastewater Treatment – Oil-Water Separators	Wastewater from petroleum refineries only
Petroleum Refining, Wastewater Treatment – Strippers including air strippers, nitrogen strippers, dissolved air flotation units, or similar equipment	Wastewater from petroleum refineries only
Petroleum Refining, Wastewater Treatment – Storage Ponds	Wastewater from petroleum refineries only
Pickling Lines or Tanks	Any Metals or Alloys
Sulfate Pulping Operations – All Units	Any
Sulfite Pulping Operations – All Units	Any

(Amended June 7, 2000)

SCHEDULE G-3
(Adopted June 18, 1980)

Equipment or Process Description	Materials Processed or Produced
Furnaces – Electric Arc	Any Metals or Alloys
Furnaces – Electric Induction	Any Metals or Alloys
Incinerators – Medical Waste, excluding units burning pathological waste exclusively (see G-1 for Pathological Waste Incinerators)	Any Medical or Infectious Wastes
Loading and/or Unloading Operations – Marine Berths	Any Organic Materials
Petroleum Refining – Cracking Units including hydrocrackers and excluding thermal or fluid catalytic crackers (see G-4 for Thermal Crackers and Catalytic Crackers)	Any Hydrocarbons
Petroleum Refining – Distillation Units (crude oils) including any unit with a capacity greater than 1000 barrels/hour (see G-1 for other distillation units)	Any Petroleum Crude Oils
Phosphoric Acid Manufacturing – All Units (by any process)	Phosphoric Acid

(Amended 5/19/82; Amended and renumbered 6/6/90; Amended 6/7/00)

SCHEDULE G-4
(Adopted June 6, 1990)

Equipment or Process Description	Materials Processed or Produced
Acid Regeneration Units	Sulfuric or Hydrochloric Acid only
Annealing Lines (continuous only)	Metals and Alloys
Calcining Kilns (see G-1 for Calcining Kilns processing other materials)	Cement, Lime, or Coke only
Fluidized Bed Combustors	Solid Fuels only
Nitric Acid Manufacturing – Any Ammonia Oxidation Processes	Ammonia or Ammonia Compounds
Petroleum Refining - Coking Units including fluid cokers, delayed cokers, flexicokers, and coke kilns	Petroleum Coke and Coke Products
Petroleum Refining - Cracking Units including fluid catalytic crackers and thermal crackers and excluding hydrocrackers (see G-3 for Hydrocracking Units)	Any Hydrocarbons
Petroleum Refining - Sulfur Removal including any Claus process or any other process requiring caustic reactants	Any Petroleum Refining Gas
Sulfuric Acid Manufacturing – Any Chamber or Contact Process	Any Solid, Liquid or Gaseous Fuels Containing Sulfur

(Amended June 7, 2000)

SCHEDULE H
SEMICONDUCTOR AND RELATED OPERATIONS
(Adopted May 19, 1982)

All of the equipment within a semiconductor fabrication area will be grouped together and considered one source. The fee shall be as indicated:

1. INITIAL FEE:

- a. The minimum fee per source is: \$179
- b. The maximum fee per source is: \$14,240

The initial fee shall include the fees for each type of operation listed below, which is performed at the fabrication area:

- c. SOLVENT CLEANING OPERATIONS, such as usage of:
Solvent Sinks (as defined in Regulation 8-30-214);
Solvent Spray Stations (as defined in Regulation 8-30-221);
Solvent Vapor Stations (as defined in Regulation 8-30-222); and
Wipe Cleaning Operation (as defined in Regulation 8-30-225).
The fee is based on the gross throughput of organic solvent processed through the solvent cleaning operations on an annual basis (or anticipated to be processed, for new sources):
 - i. If gross throughput is not more than 3,000 gal/yr: \$179
 - ii. If gross throughput is more than 3,000 gallons/year: \$121 per 1,000 gallon
- d. COATING OPERATIONS, such as application of:
Photoresist (as defined in Regulation 8-30-215); other wafer coating;
Solvent-Based Photoresist Developer (as defined in Regulation 8-30-219);
and other miscellaneous solvent usage.
The fee is based on the gross throughput of organic solvent processed through the coating operations on an annual basis (or anticipated to be processed, for new sources):
 - i. If gross throughput is not more than 1,000 gal/yr: \$179
 - ii. If gross throughput is more than 1,000 gallons/year: \$358 per 1,000 gallon

2. PERMIT TO OPERATE FEE:

- a. The minimum fee per source is: \$128
- b. The maximum fee per source is: \$7,120

The permit to operate fee shall include the fees for each type of operation listed below, which is performed at the fabrication area:

- c. SOLVENT CLEANING OPERATIONS, such as usage of:
Solvent Sinks (as defined in Regulation 8-30-214);
Solvent Spray Stations (as defined in Regulation 8-30-221);
Solvent Vapor Stations (as defined in Regulation 8-30-222); and
Wipe Cleaning Operation (as defined in Regulation 8-30-225).
The fee is based on the gross throughput of organic solvent processed through the solvent cleaning operations on an annual basis (or anticipated to be processed, for new sources):
 - i. If gross throughput is not more than 3,000 gal/yr: \$128
 - ii. If gross throughput is more than 3,000 gallons/year: \$60 per 1,000 gallon
- d. COATING OPERATIONS, such as application of:
Photoresist (as defined in Regulation 8-30-215); other wafer coating;
Solvent-Based Photoresist Developer (as defined in Regulation 8-30-219);
and other miscellaneous solvent usage.
The fee is based on the gross throughput of organic solvent processed through the coating operations on an annual basis (or anticipated to be processed, for new sources):

- i. If gross throughput is not more than 1,000 gal/yr: \$128
 - ii. If gross throughput is more than 1,000 gallons/year: \$179 per 1,000 gallon
- 3. The fee for each source will be rounded to the whole dollar. Fees for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.
- 4. Toxic Surcharge Fee: The initial fee shall be doubled and the permit to operate fee shall be raised by ten percent, for sources which emit one or more toxic air contaminant (TAC), identified by the Air Resources Board, at a rate which exceeds the trigger levels listed in Table 2-1-316 of Regulation 2, Rule 1. This fee shall not be assessed for TACs not listed in Table 2-1-316.

(Amended 1/9/85; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 10/20/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03)

SCHEDULE I
DRY CLEANERS
(Adopted July 6, 1983)

For dry cleaners, the fee shall be computed based on each cleaning machine, except that machines with more than one drum shall be charged based on each drum, regardless of the type or quantity of solvent, as follows:

1. INITIAL FEE FOR A DRY CLEANING MACHINE (per drum):
 - a. If the washing or drying capacity is no more than 100 pounds: \$179
 - b. If the washing or drying capacity exceeds 100 pounds: \$179 plus
For that portion of the capacity exceeding 100 pounds: \$5.32 per pound
2. PERMIT TO OPERATE FEE FOR A DRY CLEANING MACHINE (per drum):
 - a. If the washing or drying capacity is no more than 100 pounds: \$128
 - b. If the washing or drying capacity exceeds 100 pounds: \$128 plus
For that portion of the capacity exceeding 100 pounds: \$2.66 per pound
3. Fees for each source will be rounded to the nearest dollar. The fee for sources will be rounded up to the nearest dollar for 51 cents and above, and amounts 50 cents and lower will be rounded down to the nearest dollar.
4. Toxic Surcharge Fee: The initial fee shall be doubled and the permit to operate fee shall be raised by ten percent, for sources which emit one or more toxic air contaminant (TAC), identified by the Air Resources Board, at a rate which exceeds the trigger levels listed in Table 2-1-316 of Regulation 2, Rule 1. This fee shall not be assessed for TACs not listed in Table 2-1-316.

(Amended 10/17/84; 6/5/85; 6/4/86; 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03)

SCHEDULE K
SOLID WASTE DISPOSAL SITES
(Adopted July 15, 1987)

1. INITIAL FEE:
 - a. Inactive or Closed Solid Waste Disposal Sites \$1,067
 - b. Active Solid Waste Disposal Sites \$2,134
 - c. For applications involving only new or modified gas collection system equipment, the initial fee shall be 50% of the appropriate initial fee determined by a. or b. above.
2. PERMIT TO OPERATE FEE:
 - a. Inactive or Closed Solid Waste Disposal Sites \$533
 - b. Active Solid Waste Disposal Sites \$1,067
3. Evaluation of Reports and Questionnaires:
 - a. Evaluation of Solid Waste Air Assessment Test Report as required by Health & Safety Code Section 41805.5(g) \$848
 - b. Inactive Site Questionnaire evaluation as required by Health & Safety Code Section 41805.5(b) \$425
 - c. Evaluation of Solid Waste Air Assessment Test report in conjunction with evaluation of Inactive Site Questionnaire as required by Health & Safety Code Section 41805.5(b) \$425
 - d. Evaluation of Initial or Amended Design Capacity Reports as required by Regulation 8, Rule 34, Section 405 \$312
 - e. Evaluation of Initial or Periodic NMOC Emission Rate Reports as required by Regulation 8, Rule 34, Sections 406 or 407 \$894
 - f. Evaluation of Closure Report as required by Regulation 8, Rule 34, Section 409 \$312
 - g. Evaluation of Annual Report as required by Regulation 8, Rule 34, Section 411 \$782
4. Fees for each source will be rounded off to the nearest dollar. The fee for sources will be rounded up or down to the nearest dollar.
5. Toxic Surcharge Fee: The initial fee shall be doubled and the permit to operate fee shall be raised by ten percent, for sources which emit one or more toxic air contaminant (TAC), identified by the Air Resources Board, at a rate which exceeds the trigger levels listed in Table 2-1-316 of Regulation 2, Rule 1. This fee shall not be assessed for TACs not listed in Table 2-1-316.
6. For the purposes of this fee schedule, a solid waste disposal site shall be considered active, if it has accepted solid waste for disposal at any time during the previous 12 months or has plans to accept solid waste for disposal during the next 12 months.

(Amended 7/3/91; 6/15/94; 10/8/97; 7/1/98; 5/19/99; 10/6/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03)

SCHEDULE L
ASBESTOS OPERATIONS
(Adopted July 6, 1988)

1. Asbestos Operations conducted at single family dwellings are subject to the following fees:
 - a. OPERATION FEE: \$87 for amounts 100 to 500 square feet or linear feet.
 \$321 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
 \$466 for amounts 1001 square feet or liner feet to 2000 square feet or linear feet.
 \$641 for amounts greater than 2000 square feet or linear feet.
 - b. Cancellation: \$42 of above amounts non-refundable, for notification processing.
2. Asbestos Operations, other than those conducted at single family dwellings, are subject to the following fees:
 - a. OPERATION FEE: \$246 for amounts 100 to 159 square feet or 100 to 259 linear feet or 35 cubic feet
 \$357 for amounts 160 square feet or 260 linear feet to 500 square or linear feet or greater than 35 cubic feet.
 \$519 for amounts 501 square feet or linear feet to 1000 square feet or linear feet.
 \$764 for amounts 1001 square feet or liner feet to 2500 square feet or linear feet.
 \$1090 for amounts 2501 square feet or linear feet to 5000 square feet or linear feet.
 \$1498 for amounts 5001 square feet or linear feet to 10000 square feet or linear feet.
 \$1905 for amounts greater than 10001 square feet or linear feet.
 - b. Cancellation: \$118 of above amounts non-refundable for notification processing.
3. Demolitions (including zero asbestos demolitions) conducted at a single-family dwelling are subject to the following fee:
 - a. OPERATION FEE: \$42
 - b. Cancellation: \$42 (100% of fee) non-refundable, for notification processing.
4. Demolitions (including zero asbestos demolitions) other than those conducted at a single family dwelling are subject to the following fee:
 - a. OPERATION FEE: \$176
 - b. Cancellation: \$118 of above amount non-refundable for notification processing.
5. Asbestos operations with less than 10 days prior notice (excluding emergencies) are subject to the following additional fee:
 - a. OPERATION FEE: \$291
6. Asbestos demolition operations for the purpose of fire training are exempt from fees.

(Amended 9/5/90; 1/5/94; 8/20/97; 10/7/98; 7/19/00; 8/1/01, 6/5/02, 7/2/03)

SCHEDULE M
MAJOR STATIONARY SOURCE FEES
(Adopted June 6, 1990)

For each major stationary source emitting 50 tons per year or more of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, and/or PM₁₀, the fee shall be based on the following:

- | | | |
|----|-------------------|-----------------|
| 1. | Organic Compounds | \$53.35 per ton |
| 2. | Sulfur Oxides | \$53.35 per ton |
| 3. | Nitrogen Oxides | \$53.35 per ton |
| 4. | PM ₁₀ | \$53.35 per ton |

Emissions calculated by the APCO shall be based on the data reported for the most recent 12-month period prior to billing. In calculating the fee amount, emissions of Organic Compounds, Sulfur Oxides, Nitrogen Oxides, or PM₁₀, if occurring in an amount less than 50 tons per year, shall not be counted.

(Amended 7/3/91; 6/15/94; 7/1/98; 5/9/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03)

SCHEDULE N
TOXIC INVENTORY FEES
(Adopted October 21, 1992)

For each stationary source emitting substances covered by California Health and Safety Code Section 44300 *et seq.*, the Air Toxics "Hot Spots" Information and Assessment Act of 1987, a fee based on the weighted emissions of the facility shall be assessed based on the following formulas:

1. A fee of \$5 for each gasoline product dispensing nozzle in the facility, if the facility is a Gasoline Dispensing Facility; or
2. A fee of \$125 if the facility has emissions in the current Toxic Emissions Inventory which are greater than or equal to 50 weighted pounds per year and less than 1000 weighted pounds per year; or
3. A fee of \$125 + $S_L \times (w_i - 1000)$ if the facility has emissions in the current Toxic Emissions Inventory which are greater than or equal to 1000 weighted pounds per year;

where the following relationships hold:

w_i = facility weighted emissions for facility j; where the weighted emission for the facility shall be calculated as a sum of the individual emissions of the facility multiplied by either the Unit Risk Value for the substance times one hundred thousand (in cubic meters/microgram) if the emission is a carcinogen, or by the reciprocal of the acceptable exposure level (AEL) for the substance (in cubic meters/microgram) if the emission is not a carcinogen:

w_j = Facility Weighted Emission = $\sum_{i=1}^n E_i * Q_i$ where

n = number of toxic substances emitted by facility

E_i = amount of substance i emitted by facility in lbs/year

Q_i = Unit Risk Value * 10^5 if i is a carcinogen; or

Q_i = [Acceptable Exposure Level]⁻¹ if i is not a carcinogen

F_T = Total amount of fees to be collected by the District to cover District and State of California AB 2588 costs as most recently adopted by the Board of Directors of the California Environmental Protection Agency, Air Resources Board, and set out in the most recently published "Amendments to the Air Toxics "Hot Spots" Fee Regulation," published by that agency.

N_L = Number of facilities with emissions in current District Toxic Emissions Inventory greater than 1000 weighted pounds per year.

N_S = Number of facilities with emissions in current District Toxic Emissions Inventory greater than 50 weighted pounds per year and less than 1000 weighted pounds per year.

N_{NOZ} = Number of gasoline-product-dispensing nozzles in currently permitted Gasoline Dispensing Facilities.

S_L = Surcharge per pound of weighted emissions for each pound in excess of 1000 weighted pounds per year, where S_L is given by the following formula:

$$S_L = \frac{F_T - (125 \times N_S) - (125 \times N_L) - 5 \times N_{NOZ}}{\sum_{j=1}^{N_L} (w_j - 1000)}$$

(Amended December 15, 1993)

SCHEDULE P
MAJOR FACILITY REVIEW FEES
(Adopted November 3, 1993)

1. Each facility which is required to undergo major facility review in accordance with the requirements of Regulation 2-6, shall pay the following annual fee for each source holding a District Permit to Operate. These fees shall be in addition to and shall be paid in conjunction with the annual renewal fees paid by the facility. However, these MFR permit fees shall not be included in the basis to calculate Alternative Emission Control Plan (bubble) or toxic air contaminant surcharges.
If a major facility applies for and obtains a synthetic minor operating permit, the requirement to pay this fee shall terminate as of the date the APCO issues the synthetic minor operating permit.
MFR ANNUAL FEE \$155 per source and \$6.10 per ton of regulated air pollutants emitted
2. Effective July 1, 1999, each MFR facility and each synthetic minor facility shall pay an annual monitoring fee for each pollutant measured by a District-approved continuous emission monitor or District-approved parametric emission monitoring system.
MONITORING FEE..... \$1548 per monitor per pollutant
3. Effective July 1, 1995, each facility that applies for a permit shield under the provisions of Regulation 2-6 shall pay the following application fee for each source covered by the shield.
PERMIT SHIELD FEE..... \$386 per shielded source or group of identical sources
4. Each facility that applies for a permit, or a permit modification in accordance with the requirements of Regulation 2-6 shall pay the following fee upon receipt of a District invoice.
PUBLIC NOTICE FEE..... Cost of Publication
5. Each facility that applies for a synthetic minor operating permit in accordance with the requirements of Regulation 2-6 shall pay (up to a maximum of \$10,597) the following application fee for each source holding a District Permit to Operate. If a major facility applies for a synthetic minor operating permit prior to the date on which it would become subject to the annual major facility review fee described above, the facility shall pay, in addition to the application fee, the equivalent of one year of annual fees for each source holding a District Permit to Operate.
SYNTHETIC MINOR APPLICATION FEE..... \$152 per source
6. Each facility that applies for a significant permit revision a minor permit revision, or a revision to a synthetic minor operating permit in accordance with the requirements of Regulation 2-6 shall pay, with the application and in addition to any other fee required by this regulation, the following fee for any permitted source affected by the revision.
PERMIT REVISION FEE \$152 per source modified
(Amended 6/15/94; 10/8/97; 7/1/98; 5/19/99; 6/7/00; 6/6/01, 5/1/02, 5/21/03)

SCHEDULE Q
EXCAVATION OF CONTAMINATED SOIL AND
REMOVAL OF UNDERGROUND STORAGE TANKS
(Adopted January 5, 1994)

1. Persons excavating contaminated soil or removing underground storage tanks subject to the provisions of Regulation 8, Rule 40, Section 401, 402, 403 or 405 are subject to the following fee:
 - a. OPERATION FEE: \$118

(Amended 7/19/00; 8/1/01, 6/5/02, 7/2/03)

REGULATION 4
AIR POLLUTION EPISODE PLAN
INDEX

4-100	GENERAL
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4-301	Preplanned Abatement Strategies
4-302	Air Pollution Health Advisory/Alert
4-303	Abatement Actions
4-304	Air Pollution Warning
4-305	Air Pollution Emergency
4-400	ADMINISTRATIVE REQUIREMENTS
4-401	Termination of Episode Stages
4-402	Communications
4-403	Deleted March 20, 1991
4-404	Deleted March 20, 1991
4-500	MONITORING AND RECORDS (Not Included)
4-600	MANUAL OF PROCEDURES (Not Included)

REGULATION 4 AIR POLLUTION EPISODE PLAN

4-100 GENERAL

- 4-101 **Description:** The Air Pollution Episode Plan is a system designed to reduce levels of air contaminants which may reach or have reached the level which may be harmful to health, and to protect that portion of the population at risk. This Regulation establishes control and advisory procedures when specified levels have been reached at each of three stages.

4-300 STANDARDS

- 4-301 **Preplanned Abatement Strategies:** Any person responsible for the emission of 90.6 metric tons (100 tons) per year or more of air contaminants for which a California or federal ambient air quality standard is established shall submit a Stationary Source Curtailment Plan and a Traffic Abatement Plan to the APCO for approval.

301.1 The plans shall be submitted to the APCO within 60 days of the effective date of the regulation. If disapproved by the APCO, the plan must be resubmitted within 30 days of notice of disapproval. Such plans shall include information on the nature and quantity of air contaminants being emitted and the method and amount of reduction which will be achieved during each stage of the Air Pollution Episode Plan described in Sections 4-302, 4-304 and 4-305, and such additional information as the APCO may require in accordance with State Air Resources Board Executive Order G-53 dated January 23, 1976.

- 4-302 **Air Pollution Health Advisory/Alert:** A Health Advisory shall be declared by the APCO when the concentration of pollutants as specified for this stage in Table 1 is reached or predicted in any area of the District. This Health Advisory shall be declared only in the specifically affected areas so persons with respiratory or cardiac problems and the general public may take suitable action. Notification of such an Health Advisory shall be made by the APCO to the following:

302.1 Public Officials, including schools.

302.2 Deleted March 20, 1991

302.3 Public health, safety and emergency agencies.

302.4 News media, the population at risk and the general public

A District-wide Air Pollution Alert Shall be declared by the APCO when the concentration of pollutants specified for this stage in Table 1 is reached or predicted in any area of the District. Notification of the Alert shall be made by the APCO on a District-wide basis to all persons indicated in sub-sections 4-302.1 through 4-302.4. Additionally, notification of the alert shall be made by the APCO to:

302.5 Persons operating any facility or activity subject to 4-301, Preplanned Abatement Strategies. (Amended March 20, 1991)

- 4-303 **Abatement Actions:** When an Air Pollution Alert is declared, the following abatement actions shall be put into effect throughout the District:

303.1 All open burning shall be prohibited.

303.2 The use of incinerators for the disposal of solid waste shall be limited to the hours between 1700 and 2200 PST.

- 303.3 Lancing or soot-blowing required for fuel burning equipment shall be limited to the hours between 1700 and 2200 PST. This requirement shall not apply where the particulate emissions are abated by 95% or better efficient air pollution control equipment.
- 303.4 Preplanned abatement strategies required under Section 4-301 shall be initiated.
- 303.5 All persons operating motor vehicles shall be requested to eliminate all but essential driving.
- 303.6 Other Air Pollution Alert actions as required by the APCO in accordance with the latest California Air Pollution Emergency Plan adopted by the ARB.

(Amended March 17, 1982)

4-304 Air Pollution Warning: A District-wide Warning shall be declared by the APCO when the concentration of pollutants specified for this stage in Table 1 is reached or predicted in any area of the District. When a Warning is declared, the following abatement action shall be put into effect:

- 304.1 The abatement actions required by Sections 4-301 and 4-303.
- 304.2 The operations, services, and hours of business of all government, industrial and commercial facilities not subject to Section 4-301 shall be limited to the operations, services and hours of business customarily maintained on Sundays, as certified by the persons responsible for such facilities.
- 304.3 Other Air Pollution Warning actions as required by the APCO in accordance with the latest California Air Pollution Emergency Plan adopted by the ARB.

4-305 Air Pollution Emergency: A District-wide Emergency shall be declared by the APCO when the concentration of pollutants specified for this stage in Table 1 is reached in any area of the District. When an Emergency is declared, the following abatement actions shall be put into effect:

- 305.1 The abatement actions required by Sections 4-301 and 4-303.
- 305.2 All recreational and non-emergency commercial and industrial facilities shall be closed. Sewage treatment plants, power generating facilities or other facilities necessary to maintain the public health are deemed to be emergency facilities.
- 305.3 The APCO shall notify the ARB that a state of local emergency exists and that appropriate action may be taken by the Governor under the Emergency Services Act to prohibit the use of all motor vehicles except for emergencies, or any other action deemed warranted.
- 305.4 Other Air Pollution Emergency actions as required by the APCO in accordance with the latest California Air Pollution Emergency Plan adopted by the ARB.

4-400 ADMINISTRATIVE REQUIREMENTS

4-401 Termination of Episode Stages: The APCO shall terminate each Episode Stage when the concentration of air contaminants falls below and is expected to remain below the concentration specified for that stage in Table 1. Notification of such termination shall be made to the public and to those persons and facilities listed in Section 4-302.

4-402 Communications: The APCO may require a facility subject to Section 4-301 to acquire and maintain a selective radio call receiver or similar device for the purpose of receiving a declaration of an Alert Warning or Emergency from the District. The selective radio call receiver must be in conformance with specifications established by the APCO.

(Amended March 20, 1991)

4-403 Deleted March 10, 1991

4-404 Deleted March 10, 1991

REGULATION 4

TABLE 1

EPIISODE STAGE CRITERIA

Contaminant	Averaging Time	Health Advisory	Stage I Alert	Stage II. Warning	Stage III Emergency
Ozone	1hr.		0.20 ppm	0.35 ppm	0.50 ppm
Ozone in combination with sulfur dioxide	1 hr	-	0.20 ppm*	0.35 ppm*	0.50 ppm*
Carbon Monoxide	1 hr.	-	40 ppm	75 ppm	100 ppm
4 hrs.	-		25 ppm	45 ppm	60 ppm
8 hrs.	-		15 ppm	30 ppm	40 ppm
Sulfur Dioxide	1 hr.	-	0.5 ppm	1.0 ppm	2.0 ppm
	24 hrs.	-	0.2 ppm	0.7 ppm	0.9 ppm
PM ₁₀	24 hrs.	-	350 ug/m ³	420 ug/m ³	500 ug/m ³
Sulfate in combination with oxidant	24 hrs. (sulfate)	-		25 ug/m ³	
	1 hr. (ozone)	-		0.20 ppm	

(Amended March 20, 1991)

*These levels shall apply when the ozone concentration and the sulfur dioxide concentration each exceed 0.10 ppm, one hour average, and shall be determined by adding the ozone and sulfur dioxide concentrations.

If excessive concentrations of pollutants for which criteria have not been established occur or are predicted to occur, appropriate abatement actions shall be taken by the affected APCO after consultation with the ARB.

(Amended March 20, 1991)

REGULATION 5 OPEN BURNING

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- 5-406 Prior District Notification; Disease and Pest, Crop Replacement, Orchard Pruning and Attrition, Double Cropping Stubble, Forest Management, Flood Debris, Fire Training, Flood Control, Irrigation Ditches, Range Management, Hazardous Material, and Contraband
- 5-407 Deleted November 2, 1994
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5-500 MONITORING AND RECORDS

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MANUAL OF PROCEDURES

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Appraisal of Field Crop Fuel Moisture; The "Crackle" Test

REGULATION 5 OPEN BURNING

5-100 GENERAL

5-101 Description: This Regulation forbids open burning within the District with certain exceptions.

(Amended November 2, 1994)

5-110 Exemptions: The following fires are exempt from this Regulation:

- 110.1 Fires set only for cooking of food for human beings. Fires set for recreational purposes using only clean dry wood or charcoal, and a small amount of firestarter.
- 110.2 Fires burning as safety flares or for the combustion of waste gases.
- 110.3 The use of flame cultivation when the burning is performed with LPG or natural gas-fired burners designed and used to kill seedling grass and weeds and the growth is such that the combustion will not continue without the burner.
- 110.4 Fires set for the purposes of fire training using one gallon or less of flammable liquid per fire.

(Amended 12/19/90; 11/2/94; 3/6/02)

5-111 Conditional Exemptions: The following special conditions must be met for fires allowed by subsections 5-401.1 through 401.17 unless specifically exempted, altered, or further restricted in that subsection, or unless otherwise waived in writing by the APCO prior to burning, and these conditions shall be complied with during any burning permitted under those subsections. In addition, a condition, requirement, or parameter stated in or imposed by a smoke management plan approved by the APCO may supersede any one of these conditions.

- 111.1 No burning shall take place before 10:00 a.m. local time on any day.
- 111.2 No additional materials or fuel shall be ignited, nor shall any material or fuels be added to any fire after two hours before sunset on any day.
- 111.3 No material or fuel shall be ignited, nor shall any material or fuel be added to any fire when the wind velocity is less than five (5) miles per hour except for crossfiring, or when the wind direction at the site shall be such that the direction of smoke drift is toward a populated area in order to minimize local nuisances caused by smoke and particulate fallouts.
- 111.4 Prior to ignition, all piled material shall have dried for a minimum of 60 days, and be managed to ensure that burning the material does not produce smoke after sunset on any day.
- 111.5 All material to be burned shall be reasonably free of dirt or soil.
- 111.6 Piled material shall be limited to a base area not to exceed 25 square yards and the height shall be at least 2/3 of the average width of the pile.
- 111.7 Ignition material shall be limited to those listed by the State Director of Forestry, as follows: orchard torches; drip torches; pressurized diesel torches; propane or LPG torches; commercial petroleum gel materials, pressurized or solid (napalm or blivets); commercial safety fuses; commercial type ignition grenades, e.g. Fenner, etc.; fuses; commercial fuse lighters and matches. All fires shall be ignited so as to burn as rapidly as possible within conditions of safety and minimum pollution.
- 111.8 Ignition shall be initiated at or near the top of the piled material. No additional material, except ignition material, shall be added to the fire.
- 111.9 Tonnage, volume or acreage of material burned on any given day and/or at any specified site is subject to limitations set by the APCO, but may not exceed any limits set by the ARB.

(Amended 12/19/90; 11/2/94; 3/6/02)

5-200 **DEFINITIONS**

5-201 **Agricultural Fire:** A fire used for the purpose of initiating, continuing or maintaining agriculture as a gainful occupation. Fuels are limited to materials grown on the site and shall not include feed or fertilizer containers, finished or treated wood, plastic or rubber products, plumage, hides, fur, offal or fecal material or refuse from plant or animal processing other than from initial crop harvesting, pruning or attrition of fruit and nut trees, vines and cane crops.

(Amended 11/2/94; 3/6/02)

5-202 **Fire:** Any combustion of combustible materials of any type outdoors in the open, not in any enclosure, where the products of combustion are not directed through a flue.

5-203 **Flue:** Any duct or passages for air, gases, or the like, such as a stack or chimney.

5-204 **Gainful Occupation:** Any occupation from which there is proof of gross profit or loss as evidenced by tax receipts, sales slips or other such documents.

5-205 **Deleted December 19, 1990**

5-206 **Permissive Burn Day:** Any day that is so declared by the APCO when, in his opinion, air pollution caused by open burning will not adversely affect ambient air quality or downwind population. In declaring such permissive burn days, the meteorological criteria established by the ARB for the San Francisco Bay Area Air Basin shall be used as a guideline.

(Amended November 2, 1994)

5-207 **Treated Brush:** Material which has been felled, crushed or uprooted with mechanical equipment, or has been desiccated with herbicide.

5-208 **Hazardous Material:** For purposes of this Regulation, any combustible or flammable material which may pose a fire or explosion hazard including but not limited to, natural vegetation or other native growth cleared away to create or maintain a firebreak around any building or structure on a property as required to comply with Section 4291 of the State Public Resources Code to reduce the risk of a wildfire.

(Adopted 3/17/82; Amended 12/19/90; 11/2/94; 3/6/02)

5-209 **Public Fire Official:** An officer of a public agency charged with the responsibilities of setting or allowing fires. Public fire official includes but is not limited to, local, state, and federal officers.

(Adopted December 19, 1990)

5-210 **Contraband:** Any illegal or prohibited good that has been confiscated by a public law enforcement agency, including but not limited to explosives, pyrotechnics and illegal drugs.

(Adopted 12/19/90; Amended 11/2/94)

5-211 **Deleted March 6, 2002**

5-212 **Stubble:** The remaining stalk, stem, or trunk of a herbaceous plant or cereal grass (primarily oats, wheat and hay) after harvest of a field crop.

(Adopted November 2, 1994)

5-213 **Prescribed Burning:** The planned, controlled application of fire to vegetation to achieve a specific natural resource management objective(s) on land areas selected in advance of that application. The fire is conducted within the limits of a plan and prescription that describes both the acceptable range of weather, moisture, fuel, and fire behavior parameters to achieve the desired effects. For the purposes of this regulation, prescribed burning also means any Forest Management fire, Range Management fire, Hazardous Material fire not related to Public Resources Code Section 4291, or any Crop Replacement fire for the purpose of establishing an agricultural crop on previously uncultivated land, that is expected to exceed 10 acres in size or burn piled vegetation cleared or generated from more than 10 acres of land. These specific fire types shall be regulated as Wildland Vegetation Management fires and subjected to all of the requirements applicable to subsection 5-401.15. In addition, prescribed burning includes any naturally-ignited wildland fire managed for resource benefits that is subject to the applicable requirements in Section 5-408.

(Adopted 11/2/94; Amended 3/6/02)

- 5-214 Backfiring:** A field crop burn ignition technique where the fire is ignited at the downwind side of the burn area, so that the fire must burn into the wind towards the fuel source.
(Adopted November 2, 1994)
- 5-215 Stripfiring:** A field crop burn ignition technique where the fire is ignited in parallel strips by walking straight through the burn area into the wind.
(Adopted November 2, 1994)
- 5-216 'X' or Crossfiring:** A field crop burn ignition technique where the fire is ignited in two semi-circle arch patterns that almost intersect in the middle of the burn area. The first fire is lit by walking into the wind from the downwind side. The second fire is lit by walking with the wind from the headwind side of the field. This technique is used during light (less than five miles per hour) and variable winds only.
(Adopted November 2, 1994)
- 5-217 Property:** A single parcel of real property, as determined by the County Assessor. The term also includes contiguous parcels under the same ownership.
(Adopted November 2, 1994)
- 5-218 APCO:** The Air Pollution Control Officer of the Bay Area Air Quality Management District or the designee thereof.
(Adopted November 2, 1994)
- 5-219 ARB:** The Air Resources Board of the State of California.
(Adopted November 2, 1994)
- 5-220 District:** The Bay Area Air Quality Management District.
(Adopted November 2, 1994)
- 5-221 Forest:** A vegetation type or plant community covering a tract of land, which is named and described as a series, habitat or unique stand according to the California Native Plant Society (CNPS) classification system set forth in the most current edition of *A Manual of California Vegetation* published by CNPS, and dominated by trees growing more or less closely together. For the purposes of this regulation, the dominant vegetation form must be described as a broadleaf deciduous, broadleaf evergreen, conifer, or mixed broadleaf-conifer forest. Forest does not include chaparral, scrub and grassland communities, or the eucalyptus series, as these vegetation types are described in the CNPS classification system.
(Adopted March 6, 2002)
- 5-222 Marshland:** A type of wetland ecosystem periodically or permanently inundated to a depth of up to 2 meters (6.6 feet) that supports a cover of low or tall emergent vegetation. Habitats within these water-land areas include diked, seasonally managed wetlands, unmanaged tidal wetlands, open bays, sloughs, and associated upland grasslands.
(Adopted March 6, 2002)
- 5-300 STANDARDS**
- 5-301 Prohibition of Fires:** Except as provided in this regulation:
- 301.1 A person shall not ignite, cause to be ignited, permit to be ignited, or suffer, allow, or maintain any fires within the District.
 - 301.2 No burning shall take place within the District on other than a permissive burn day, or in excess of any acreage burning allocation or limitation.
 - 301.3 A person shall not violate any condition, requirement, or parameter stated in or imposed by a smoke management plan approved by the APCO, or any special condition or administrative requirement in this regulation.
(Amended 11/1/94; 3/6/02)
- 5-400 ADMINISTRATIVE REQUIREMENTS**
- 5-401 Allowable Fires:** The following fires may be allowed on permissive burn days:
- 401.1 Disease and Pest: Agricultural fires set for the purpose of disease and pest prevention. The fire must be set or allowed by the Agricultural Commissioner of the County in the performance of official duty. Prior reporting pursuant to Section 5-406 must be made to the APCO, by the person setting the fire.
(Amended 12/19/90; 11/2/94; 3/6/02)

- 401.2 Crop Replacement: Agricultural fires set for the purpose of establishing an agricultural crop in a location that formerly contained another type of agricultural crop or on previously uncultivated land. The fire must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be necessary for the crop replacement to proceed. Fires are limited to a period beginning October 1 and ending April 30; however, upon the determination of the APCO that heavy winter rainfall has prevented such burning, the burn period may be extended to no later than June 30. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended 12/19/90; 11/2/94; 3/6/02)

- 401.3 Orchard Pruning and Attrition: Agricultural fires set for the purpose of disposal of periodic prunings and attrition losses from fruit trees, nut trees, vineyards and cane fruits. Fires must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be necessary to maintain and continue the growing of the fruit trees, vineyards and cane fruits as a gainful occupation. Fires are limited to a period beginning November 1 and ending April 30; however, upon the determination of the APCO that heavy winter rainfall has prevented such burning, the burn period may be extended to no later than June 30. When pruning is performed between February 15 and April 30 for integrated pest management purposes, the following minimum drying time periods shall apply: trees and branches over six inches in diameter: 30 days; for grape vines and branches less than or equal to six inches in diameter: 15 days. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended 3/15/81; 12/19/90; 11/2/94; 3/6/02)

- 401.4 Double Cropping Stubble: Agricultural fires set for the purpose of disposal of grain stubble from agricultural land from which both grain and vegetable crops are harvested during the same calendar year. Fires must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must be necessary to remove the grain stubble and straw before a field vegetable crop can be planted. All material to be burned shall be free of visible surface moisture. No fires shall take place before 10:00 a.m. local time on any day. Fires are limited to a period beginning June 1 and ending August 31. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended 12/19/90; 11/2/94; 3/6/02)

- 401.5 Stubble: Agricultural fires set for the purpose of disposal of stubble and straw. Fires must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must be necessary to maintain and continue the growing of field crops as a gainful occupation. Fire ignition techniques shall be limited to backfiring, stripfiring, and 'X' or crossfiring unless an alternate technique is approved by the APCO in writing where a specific field condition is determined not to lend itself to these techniques in a given year. All material to be burned shall be free of visible surface moisture. After 0.15 inches or more rainfall, the material must pass the "crackle" test pursuant to Section 5-601 prior to burning. No fires shall take place before 10:00 a.m. local time on any day. Fires are limited to a period beginning September 1 and ending December 31. Outside of Sonoma County, no more than 100 acres of any property shall be burned in a single day. Within Sonoma County, no person shall conduct a burn without receiving an acreage burning allocation from the APCO and no more than 500 acres total of all properties shall be burned in a single day. In addition, no more than 100 acres of any property shall be burned in a single day. If by 12:00 p.m. local time the daily 500-acre burn acreage limitation has not been allocated, up to 200 acres of any property may be burned in a single day provided:
- a. the additional acreage burning allocation has been approved verbally by the APCO; and

- b. no more than two fields exceeding 100 acres total are burned simultaneously on the same property.
(Amended 12/19/90; 11/2/94; 3/6/02)
- 401.6 Hazardous Material: Any fires set for the purpose of the prevention or reduction of a fire hazard, including the disposal of dangerous materials. The fire must be set or allowed by any public fire official having jurisdiction, in the performance of official duty. The fire must, in the opinion of such officer, be necessary, and the fire hazard not able to be abated by any other means. However, these fires may also be conducted to dispose of materials generated to comply with an order or notice issued by an fire official pursuant to Section 4291 of the State Public Resources Code provided all of the following conditions are satisfied:
- only natural vegetation or other native growth may be burned;
 - the amount of material to be burned shall be greater than 5 cubic yards cleared annually from a single property;
 - the material is burned where it was grown without being moved to a different location unless approved by the APCO;
 - the material is inaccessible for removal by vehicle and available alternatives to burning such as shredding, chipping, composting, disking, plowing, and harrowing are not feasible; and
 - the material, if ignited accidentally, would result in a fire of such magnitude as to immediately threaten life or adjacent improved property or resources and require an excessive fire suppression effort.
- No fires involving piled material shall be ignited or take place before 9:30 a.m. local time on any day. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.
(Amended 12/19/90; 11/2/94; 3/6/02)
- 401.7 Fire Training: Fires set for the exclusive purpose of instruction of either public or industrial employees in fire fighting methods. The fire must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be, in his opinion, necessary. Notwithstanding contrary provisions of Section 5-111, a fire fighting agency may set one fire per quarter calendar year for the purpose of training volunteer or seasonal fire fighters. This may be done on other than a permissive burn day if the APCO is notified in writing or facsimile at least two weeks in advance. Fires may be conducted outside of the burn hour limits in subsections 5-111.1 and 111.2 if the APCO is notified in writing or facsimile at least seven calendar days in advance. Prior reporting pursuant to Section 5-406 must also be made to the APCO for other fire training by the person setting the fire.
(Amended 12/19/90; 11/2/94; 3/6/02)
- 401.8 Flood Debris: Agricultural fires set for the purpose of removing wood and vegetation debris deposited by floodwaters. The fire must be set or allowed by the public fire official having jurisdiction, in the performance of official duty, and must be necessary for the continuing or maintaining of agriculture as a gainful occupation. Fires are limited to a period beginning October 1 and ending May 31. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.
(Amended 12/19/90; 11/2/94; 3/6/02)
- 401.9 Irrigation Ditches: Agricultural fires set for the purpose of controlling growth of vegetation in irrigation ditches and canals. The fire must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must, in the opinion of such officer, be necessary to avoid interference with water flow or drainage into irrigated land. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.
(Amended 12/19/90; 11/2/94; 3/6/02)
- 401.10 Flood Control: Fires set for the purpose of disposal of material which is lying or growing within natural channels or flood control channels. The fire must be set or allowed by a public official in charge of flood control activities. The fire must, in the opinion of such official, be a necessary incident to the clearing and maintenance of water courses and flood control channels for

preventing or eliminating a flood hazard. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended 12/19/90; 11/2/94)

- 401.11 Range Management: Fires set for the purpose of range management and grazing. The fire must be set or allowed by the State Director of Forestry, or public fire official having jurisdiction, in the performance of official duty, and must be necessary to maintain and continue the grazing of animals as a gainful occupation. Brush to be burned shall be treated at least six months prior to burn if determined to be technically feasible by the State Director of Forestry or public fire official. Unwanted trees over 6 inches in diameter shall be felled prior to burn and dried for a minimum of six months. Feasibility shall be subject to the approval of the APCO. Subsections 5-111.1 and 5-111.6 may be waived by the State Director of Forestry or fire official when determined necessary in the public interest. Fires are limited to a period beginning July 1 and ending April 30. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended 12/19/90; 11/2/94; 3/6/02)

- 401.12 Forest Management: Fires set for the purpose of removing forest debris and for forest management. The fire must be set or allowed by a public fire official having jurisdiction, in the performance of official duty, and must, in his opinion, be necessary. Subsections 5-111.1 and 5-111.6 may be waived by the fire official when deemed necessary in the public interest. All materials shall be piled or windrowed unless deemed poor practice by the fire official. Fires are limited to a period beginning November 1 and ending April 30. Prior reporting pursuant to Section 5-406 must be made to the APCO by the person setting the fire.

(Amended 12/19/90; 11/2/94; 3/6/02)

- 401.13 Marsh Management: Fires set for the purpose of improvement of marshland for wildlife habitat. The fire must be declared necessary by the California Department of Fish and Game. No such fire may be allowed on a given piece of land more than once in any 2 year period. The California Department of Fish and Game shall provide the APCO such information as may be deemed necessary by the APCO to verify the necessity of each burn and land area burning frequencies. Any person seeking to set fires under this provision shall also comply with the requirements of Section 5-410 and receive written APCO approval of the smoke management plan prior to any burn. No fires shall take place before 10:00 a.m. or after 3:00 p.m. local time, nor shall any existing burning be allowed to continue after 3:00 p.m. local time on any day. Fires are limited to a Spring burning period beginning February 1 and ending March 31, and a Fall burning period beginning September 1 and ending October 15; however, upon the determination of the APCO in consultation with the California Department of Fish and Game and the Solano County Mosquito Abatement District, that heavy winter rainfall has prevented such burning, the burn period beginning February 1 and ending March 31 may be extended to no later than June 30. Outside of the Suisun Resource Conservation District (SRCD), no person shall conduct a burn without receiving an acreage burning allocation from the APCO and no more than 100 acres of any property shall be burned in a single day. For fires conducted within the boundaries of the SRCD:

- a. no person shall conduct a burn without receiving an acreage burning allocation from the APCO;
- b. total daily acreage to be burned shall be determined by the APCO, but in no case shall the total acreage burning allocation exceed 300 acres/day during the Fall burning period and 600 acres/day during the Spring burning period. In addition, no more than 100 acres of any property and no more than 100 acres of all properties designated by the same SRCD hundred-series ownerships shall be burned in a single day during the Fall or Spring burning period.

(Amended 3/15/81; 5/20/81; 8/3/83; 11/2/94; 3/6/02)

- 401.14 Contraband: Fires set for the purpose of disposing of contraband. The fire must be set or allowed by any peace officer or public fire official, in the performance of official duty. The fire must, in the opinion of such officer, be necessary and the material not be able to be disposed of by any other means. Prior reporting must be made to the APCO by the person setting the fire pursuant to Section 5-406.

(Adopted 12/19/90; Amended 11/2/94)

- 401.15 Wildland Vegetation Management: Prescribed burning by a state or federal agency, or through a cooperative agreement or contract involving the state or federal agency, conducted on land predominately covered with chaparral, trees, grass, coastal scrub, or standing brush. Any person seeking to set fires under this provision shall comply with the requirements of Section 5-408 and receive written approval of the smoke management plan by the APCO prior to any burn. Until June 1, 2002, this fire may be conducted on other than a permissive burn day, as defined in Section 5-206, if approved by the APCO pursuant to subsection 5-408.2. Effective June 1, 2002, fires may not be conducted on other than a permissive burn day.

(Adopted November 2, 1994)

- 401.16 Filmmaking: Fires set as part of commercial film or video production activities for motion pictures and television. The fire shall be set or allowed by the public fire official having jurisdiction, in the performance of official duty. Any person seeking to set fires under this provision shall comply with the requirements of Section 5-409 and receive APCO approval in writing at least 10 working days prior to the burn. This fire may be done on other than a permissive burn day, as defined in Section 5-206, if approved by the APCO pursuant to subsection 5-409.2.

(Adopted November 2, 1994)

- 401.17 Public Exhibition: Fires set as part of a planned civic event designed to educate or otherwise benefit the public. The fire shall be set or allowed by the public fire official having jurisdiction, in the performance of official duty. Any person seeking to set fires under this provision shall comply with the requirements of Section 5-409 and receive APCO approval in writing at least 10-working days prior to the burn. This fire may be conducted on other than a permissive burn day, as defined in Section 5-206, if approved by the APCO pursuant to subsection 5-409.2.

(Adopted 11/2/94; Amended 3/6/02)

5-402 Deleted November 2, 1994

- 5-403 Agricultural Land Use:** Debris from land clearing shall not qualify under subsections 5-401.1, 5-401.2, 5-401.3, 5-401.4 or 5-401.5 unless applicant certifies, under penalty of perjury, that said land is to remain in agricultural use for a gainful occupation for a period of one year subsequent to the burning, and that applicant has not caused or contributed to the need for the burning of the material for any reason other than the promotion of agricultural use of the land for a gainful occupation. However, the County Agricultural Commissioner may waive this Section by certifying that burning of the material under subsection 5-401.1 is, in his opinion, the only safe method of disposal. Failure to comply with the conditions of this Section shall be considered a violation of this Regulation. Each pile burned in violation shall be cited as a separate offense.

(Amended 11/2/94; 3/6/02)

- 5-404 Emergency Waivers:** A public officer authorized under subsections 5-401.1, 5-401.6 and 5-401.10 to grant permission for open burning may grant waivers from subsections 5-111.1 through 5-111.9 when, in his judgment, such emergency or summary action is necessary for the public safety. When such action is taken, the authorizing authority shall certify the following in a written report submitted to the APCO within 10 calendar days following the completion of burning: a description and quantity of the material burned and an explanation of the reasons for granting the permission.

(Amended 11/2/94; 3/6/02)

5-405 Deleted March 6, 2002

5-406 **Prior District Notification; Disease and Pest, Crop Replacement, Orchard Pruning and Attrition, Double Cropping Stubble, Forest Management, Flood Debris, Fire Training, Flood Control, Irrigation Ditches, Range Management, Hazardous Material, and Contraband:** The person setting the fire shall provide electronic, typewritten, legibly handwritten, or computer printed notification to the District prior to the burn on a District-approved form or facsimile thereof. If notification is submitted by mail, the document must be postmarked at least 5 calendar days prior to the burn. The notification form must be completely filled out with accurate information to satisfy this requirement. For structural fire training, written notification shall also be made to the APCO at least 10 working days prior to the burn pursuant to the requirements of Regulation 11-2-401.3 (Asbestos Demolition, Renovation and Manufacturing).

(Adopted 12/19/90; Amended 11/2/94; 3/6/02)

5-407 **Deleted November 2, 1994**

5-408 **Wildland Vegetation Management Burn Requirements:** Any person who seeks to conduct or conducts prescribed burning pursuant to subsection 5-401.15 shall comply with the following requirements:

408.1 Submit a smoke management plan to the APCO for review at least 30 calendar days prior to the proposed burning that is consistent with the most current USEPA guidance on wildland and prescribed fires (*Interim Air Quality Policy on Wildland and Prescribed Fires*, USEPA 1998, or any subsequent document that supersedes this document), and provides the following information:

- a. location and specific objectives of each proposed burn;
- b. acreage, tonnage, type, and arrangement of vegetation to be burned;
- c. directions and distances to nearby sensitive receptor areas;
- d. fuel condition, combustion and meteorological prescription elements for the project;
- e. projected burn schedule and expected duration of project ignition, combustion, and burn down (hours or days);
- f. specifications for monitoring and of verifying critical parameters including meteorological conditions and smoke behavior before and during the burn;
- g. specifications for disseminating project information to public;
- h. contingency actions that will be taken during the burn to reduce exposure if smoke intrusions impact any sensitive receptor area;
- i. certification by a qualified professional resource ecologist, biologist, or forester that the proposed burning is necessary to achieve the specific management objective(s) of the plan;
- j. a copy of the environmental impact analysis prepared for the plan that includes an evaluation of alternatives to burning, if such an analysis was required by state or federal law or statute;
- k. project fuel loading estimate (tons vegetation/acre) by vegetation type(s) and a description of the calculation method; and
- l. particulate matter emissions estimate including referenced emission factor(s) and a description of the calculation method used.

408.2 Until June 1, 2002, permission to burn on other than a permissive burn day shall be governed by the 48-hour forecast issued by the APCO. Effective June 1, 2002, permission to burn shall be governed by the acreage burning allocation issued by the APCO.

408.3 Until June 1, 2002, prior to ignition, notify the APCO on the day of each burn. Effective June 1, 2002, receive an acreage burning allocation from the APCO prior to ignition.

408.4 For each day on which burning occurs, report the total acreage and tonnage of vegetation actually burned to the APCO by telephone no later than 12:00 p.m. local time the following day.

408.5 Within 30 calendar days following completion of the burn project, provide a written post-burn evaluation to the APCO that addresses whether the project objectives were met and describes actual smoke behavior.

Effective June 1, 2002, any fire official seeking to conduct prescribed burning in a geographical area considered for a potential naturally-ignited wildland fire managed for resource benefits that is expected to exceed 10 acres in size shall annually register each burn project in writing with the APCO by December 31 each year, with updates as they occur. Once a decision is made to manage the fire for resource benefits, the fire official shall provide a smoke management plan for the burn project to the APCO, upon request.

(Adopted 11/2/94; Amended 3/6/02)

5-409 Filmmaking and Public Exhibition Burn Petitions: Any person seeking to conduct a fire pursuant to subsection 5-401.16 or 401.17 shall comply with the following requirements:

- 409.1 Submit an open burning petition to the APCO that provides the following information, as applicable:
 - a. date(s) and specific location(s) of each proposed burn;
 - b. type and quantity (tonnage, acreage, or volume) of each material to be burned;
 - c. the projected fuel use rate in BTU per hour, if known, calculated using the higher heating value of each fuel; and
 - d. the burn duration.
- 409.2 Permission to burn on other than a permissive burn day shall be subject to written approval of the open burning petition by the APCO.
- 409.3 Prior to ignition, notify the APCO on the day of each burn.
- 409.4 If the APCO grants written approval, such approval shall be available at the burn location for inspection by the APCO, upon request.

(Adopted 11/2/94; Amended 3/6/02)

5-410 Marsh Management Burn Requirements: Effective June 1, 2002, any person who seeks to conduct or conducts a fire pursuant to Subsection 5-401.13 shall:

- 410.1 In order to receive an acreage burning allocation, at least 30 calendar days prior to the proposed burning, submit a smoke management plan to the APCO for review using a District-approved form;
- 410.2 In securing the written necessity statement required by California Health and Safety Code Section 41861, submit to the California Department of Fish and Game (DFG) and the APCO information that (1) identifies the non-burning alternatives considered by the property owner(s) given the recommendations or needed improvements described in existing Individual Ownership Management Plans, updated Individual Ownership Adaptive Management Habitat Plans, Wildlife Management Plans or other resource management plans as applicable; and (2) explains why water management practices and non-burn vegetation management practices cannot currently achieve the management objective(s) of the proposed fire and the property. Where DFG is conducting a burn on state lands, this information shall be submitted by DFG to the APCO prior to the proposed burning;
- 410.3 Prior to the proposed burning, submit the written statement required by Health and Safety Code Section 41861 to the APCO;
- 410.4 For each day on which burning occurs, report the total acreage of vegetation actually burned to the APCO by telephone no later than 12:00 p.m. local time the following day.

(Adopted March 6, 2002)

5-500 MONITORING AND RECORDS

5-501 Open Burning Records: Effective June 1, 2002, any person subject to Section 5-408 or 5-410 shall comply with the following requirements:

- 501.1 The person who conducts the fire shall maintain records on a daily basis that document and verify the actual acreage burned. Such documentation shall include the following information:
 - a. date and location of burn
 - b. a description of the method(s) or technique(s) used to verify the actual acreage burned

- c. data collected that supports the burn acreage determination, and
 - d. type of vegetation and acreage actually burned.
- 501.2 Such records shall be retained for twelve months and made available to the APCO, upon request.

(Adopted 12/90; Amended 11/2/94; 3/6/02)

5-600 MANUAL OF PROCEDURES

5-601 Appraisal of Field Crop Fuel Moisture; The "Crackle" Test: Any person who wants to conduct an evaluation of fuel moisture in field crop stubble or straw remaining after harvest pursuant to subsection 5-401.5 shall satisfy the following criteria prior to burning:

- 601.1 Sampling: To ensure representative sampling, sample in accordance with the following requirements:
- a. obtain samples from several different areas of the field
 - b. select some samples from underneath the straw mat including the bottom layer
 - c. a handful of sample material is considered a sufficient size to test.
- 601.2 Evaluation: The field is considered dry enough to burn, or passes the "crackle" test when:
- a. each sample is tested just prior to burning
 - b. each sample tested makes an audible "crackle" when it is bent sharply.
 - c. If the sample does not pass the test, then the area from which the sample was selected cannot be burned until such material is considered dry enough to burn.

(Adopted November 2, 1994)

REGULATION 6
PARTICULATE MATTER AND VISIBLE EMISSIONS
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REGULATION 6

PARTICULATE MATTER AND VISIBLE EMISSIONS

6-100 GENERAL

- 6-101 **Description:** The purpose of this Regulation is to limit the quantity of particulate matter in the atmosphere through the establishment of limitations on emission rates, concentration, visible emissions and opacity.
- 6-110 **Exemption, Temporary Sandblasting Operations:** Temporary Sandblasting operations are exempt from the provisions of this Rule. Such operations are subject to the provisions of Regulation 12, Rule 4. (Adopted July 11, 1990)
- 6-111 **Exemption, Open Outdoor Fires:** The limitations of this rule shall not apply to emissions arising from open outdoor fires. (Adopted December 19, 1990)

6-200 DEFINITIONS

- 6-201 **Exhaust Gas Volume:** The volume of gases discharged from an operation; or an emission point.
- 6-202 **Particulate Matter:** Any material which is emitted as liquid or solid particles, or gaseous material which becomes liquid or solid particles at the testing temperatures specified in the Manual of Procedures, excluding uncombined water.
- 6-203 **Process Weight:** The total weight of all material introduced into an operation, excluding liquids and gases used solely as fuels, air which is not consumed as a reactant, and combustion air.
- 6-204 **Process Weight Rate:** A rate established as follows:
- 204.1 For continuous or long-run steady-state operations, the total process weight for the entire period of continuous operation or for a typical portion thereof, divided by the number of hours of such period or portions thereof.
- 204.2 For cyclical or batch operations, the total process weight for a period which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during such period. Where the nature of any process or operation or the design of any equipment is such as to permit more than one interpretation of this section, that interpretation which results in the minimum value for allowable emission shall apply.

6-300 STANDARDS

- 6-301 **Ringelmann No. 1 Limitation:** Except as provided in Sections 6-303, 6-304 and 6-306, a person shall not emit from any source for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree. (Amended July 11, 1990)
- 6-302 **Opacity Limitation:** Except as provided in Sections 6-303, 6-304 and 6-306, a person shall not emit from any source for a period or periods aggregating more than three minutes in a any hour an emission equal to or greater than 20% opacity as perceived by an opacity sensing device, where such device is required by District regulations. (Amended July 11, 1990)
- 6-303 **Ringelmann No. 2 Limitation:** A person shall not emit for a period or periods aggregating more than three minutes in any hour, a visible emission which is as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree, nor shall said emission, as perceived by an opacity sensing device in good working order, where such device is

required by District regulations, be equal to a greater than 40% opacity, from the following sources:

- 303.1 Internal combustion engines of less than 25 liters (1500 in³) displacement, or any engine used solely as a standby source of motive power;
- 303.2 Laboratory equipment used exclusively for chemical or physical analyses or experimentation;
- 303.3 Portable brazing, soldering or welding equipment;
- 303.4 Deleted July 11, 1990

(Amended January 5, 1983, July 11, 1990)

- 6-304 **Tube Cleaning:** During tube cleaning, and except for three minutes in any one hour, a person shall not emit from any heat transfer operation using fuel at a rate of not less than 148 GJ (140 million BTU) per hour, a visible emission as dark or darker than No. 2 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree; or equal to or greater than 40% opacity as perceived by an opacity sensing device in good working order. The aggregate duration of such emissions in any 24 hour period shall not exceed 6.0 minutes per 1055 GJ (one billion BTU) gross heating value of fuel burned during such 24 hour period.
- 6-305 **Visible Particles:** A person shall not emit particles from any operation in sufficient number to cause annoyance to any other person, which particles are large enough to be visible as individual particles at the emission point or of such size and nature as to be visible individually as incandescent particles. This Section 6-305 shall only apply if such particles fall on real property other than that of the person responsible for the emission.
- 6-306 **Diesel Piledriving Hammers:** Piledriving hammers powered by diesel fuel shall comply with one of the following standards:
 - 306.1 A person shall not emit from any diesel piledriving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 1 on the Ringelmann Chart, or of such opacity as to obscure an observer's view to an equivalent or greater degree.
 - 306.2 A person shall not emit from any diesel piledriving hammer for a period or periods aggregating more than four minutes during the driving of a single pile, a visible emission which is as dark or darker than No. 2 on the Ringelmann Chart or of such opacity as to obscure an observer's view to an equivalent or greater degree provided that the operator utilizes kerosene, smoke suppressing fuel additives and synthetic lubricating oil, and the requirements of Section 6-503 are satisfied. (Adopted July 11, 1990)
- 6-310 **Particulate Weight Limitation:** A person shall not emit from any source particulate matter in excess of 343 mg per dscm (0.15 gr. per dscf) of exhaust gas volume.
 - 310.1 **Incineration or Salvage Operations.** For the purposes of 6-310, the actual measured concentration of particulate matter in the exhaust gas from any incineration operation or salvage operation shall be corrected to the concentration which the same quantity of particulate matter would constitute in the exhaust gas minus water vapor corrected to standard conditions, containing 12% CO₂ by volume, and as if no auxiliary fuel had been used.
 - 310.2 **Gas-fired Pathological Waste Incinerators.** The particulate emissions from gas-fired pathological waste incinerators, where emissions are not mingled with emissions from incineration of general wastes, shall be corrected as specified in Section 6-310.1 except that correction for auxiliary fuel shall not be required.
 - 310.3 **Heat Transfer Operation.** For the purposes of 6-310, the actual measured concentration of particulate matter in the exhaust from any heat transfer operation shall be corrected to the concentration which the same quantity of particulate matter would constitute in the exhaust gas minus water vapor, corrected to standard conditions, containing 6% oxygen by volume.

6-311 General Operations: In addition to the limitation of Section 6-310, a person shall not discharge into the atmosphere from any general operation particulate matter from any emission point, at a rate in excess of that specified in Table 1 for the process weight rate indicated. This section shall not apply to fuel-fired indirect heat exchangers.

TABLE 1

ALLOWABLE RATE OF EMISSIONS BASED ON PROCESS WEIGHT RATE

Process wt rate = P		Emission = E	
kg/hour	lbs/hour	kg/hour	lbs/hour
250	550	0.8	1.8
300	660	0.9	2.0
400	880	1.1	2.4
500	1100	1.3	2.9
1000	2205	2.1	4.6
2000	4410	3.3	7.3
3000	6615	4.3	9.5
4000	8820	5.2	11.0
5000	11020	6.0	13.0
10000	22045	9.6	21.0
20000	44090	15.2	33.0
over 26000	57320	18.1	40.0

(interpolation formula deleted May 21, 1980. See page 605 for formulae.)

Interpolation in kg/hr

$$E \text{ in kg/hr} = 0.02 P^{0.67} \text{ in kg/hr}$$

The interpolation of the data in this Table shall be accomplished by the use of the equation $E = 0.022P^{0.67}$, where E = rate of emission in kg/hour, not to exceed 18.1 kg/hour and P = process weight rate in kg/hour.

interpolation in lbs/hr

$$E \text{ in lbs/hr} = 4.10 P^{0.67} \text{ in lbs/hr}$$

6-320 Sulfuric Acid Manufacturing Plants: A person shall not emit from any operation manufacturing sulfuric acid using as a principal raw material any sulfur-containing material, any emission having a concentration of SO_3 or H_2SO_4 , or both, expressed as 100% H_2SO_4 , exceeding 92 mg per dscm (0.04 gr. per dscf) of exhaust gas volume.

6-330 Sulfur Recovery Units: A person shall not emit from any operation manufacturing sulfur, using as a principal raw material any sulfur-containing material, any emission having a concentration of SO_3 or H_2SO_4 , or both, expressed as 100% H_2SO_4 , exceeding 183 mg dscm (0.08 gr. dscf) of exhaust gas volume.

6-400 ADMINISTRATIVE REQUIREMENTS

6-401 Appearance of Emissions: Every person responsible for an emission (except from gas fired heat transfer operations regulated by Sections 6-301, 6-303 and 6-304) shall have and maintain means whereby the operator of the plant shall be able to know the appearance of the emission at all times.

6-500 MONITORING AND RECORDS

- 6-501 Sampling Facilities and Instruments Required:** Persons subject to this regulation shall provide sampling facilities and install instruments as required pursuant to the provisions of Sections 1-501, 1-520 and 1-521 of Regulation 1.
- 6-502 Data, Records and Reporting:** Persons monitoring emissions in accordance with the requirements of Sections 1-520 and 1-521 of Regulation 1 shall keep records, report emission excesses and provide summaries of data collected as required by Regulation 1.
- 6-503 Records:** A person responsible for the operation of a diesel pile-driving hammer who chooses to comply with subsection 6-306.2 shall maintain and have available for inspection records which establish the use of kerosene, smoke suppressing fuel additives and synthetic lubricating oil. (Adopted July 11, 1990)

6-600 MANUAL OF PROCEDURES

- 6-601 Particulate Matter, Sampling, Sampling Facilities, Opacity Instruments and Appraisal of Visible Emissions:** The MOP contains the testing temperature for the determination of the presence of particulate matter, procedures relating to the siting of sampling facilities, source test procedures, opacity instrument specifications, calibration and maintenance requirements, and the procedure for appraising visible emissions.

REGULATION 7 ODOROUS SUBSTANCES

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REGULATION 7

ODOROUS SUBSTANCES

7-100 GENERAL

7-101 Description: This Regulation places general limitations on odorous substances and specific emission limitations on certain odorous compounds. A person must meet all limitations of this Regulation, but meeting such limitations shall not exempt such person from any other requirements of the District, state or federal law. See also Rule 1, Sulfur Dioxide and Rule 2, Hydrogen Sulfide, of Regulation 9, Inorganic Gaseous Pollutants.

7-102 Citizen Complaints: The limitations of this Regulation shall not be applicable until the APCO receives odor complaints from ten or more complainants within a 90-day period, alleging that a person has caused odors perceived at or beyond the property line of such person and deemed to be objectionable by the complainants in the normal course of their work, travel or residence. When the limits of this regulation become effective as a result of citizen complaints described above, the limits shall remain effective until such time as no citizen complaints have been received by the APCO for 1 year. The limits of this Regulation shall become applicable again when the APCO receives odor complaints from five or more complainants within a 90-day period. (Amended May 21, 1980)

7-110 Exemptions: The following buildings, materials and operations are exempted from this regulation:

110.1 Single family dwellings.

110.2 Restaurants and other establishments for the purpose of preparing food for human consumption employing less than 5 persons.

110.3 Materials odorized for safety purposes.

110.4 Materials possessing strong odors for reasons of public health and welfare, and where no suitable substitute is available and where best modern practices are employed.

110.5 Agricultural operations as described in the California Health and Safety Code, Section 41705.

7-200 DEFINITIONS

7-201 Odor Free Air: Air which has been passed through a drying agent followed by two successive beds of activated carbon.

7-202 Kraft Pulp Mill: Any combination of industrial operations which converts wood to pulp, and which uses in the pulping process an alkaline sulfide cooking liquor containing sodium hydroxide and sodium sulfide.

TABLE I

DILUTION RATES

Elevation of Emission Point above Grade in Meters (Feet)	Dilution Rate (Volumes of odor-free air per volume of source sample)
Less than 9 (30)	1,000
9 to 18 (30 to 60)	3,000
18 to 30 (60 to 100)	9,000
30 to 55 (100 to 180)	30,000
greater than 55 (180)	50,000

7-300 STANDARDS

- 7-301 General Limit on Odorous Substances:** A person shall not discharge any odorous substance which remains odorous after dilution with odor-free air as specified in Table I. Samples shall be collected and analyzed as prescribed in Section 7-400.
- 7-302 Limit on Odorous Substances at or Beyond Property Line:** A person shall not discharge any odorous substance which causes the ambient air at or beyond the property line of such person to be odorous and to remain odorous after dilution with four parts of odor-free air.
- 7-303 Limit on Odorous Compounds:** A person shall not discharge concentrations of odorous compounds in excess of those specified in Table II, except that this Section shall not apply to kraft mills.

TABLE II

MAXIMUM ALLOWABLE EMISSION CONCENTRATIONS IN PPM

Compound or Family of Compounds	Type A Emission Point	Type B Emission Point
Dimethylsulfide (CH ₃) ₂ S	0.1	0.05
Ammonia NH ₃	5000	2500
Mercaptans calculated as Methylmercaptan CH ₃ SH	0.2	0.1
Phenolic compounds calculated as phenol C ₆ H ₅ OH	5.0	2.5
Trimethylamine (CH ₃) ₃ N	0.02	0.02

7-400 ADMINISTRATIVE REQUIREMENTS

- 7-401 Collection of Samples:** Samples shall be taken and transported in a manner which minimizes alteration of the samples either by contamination or loss of odorous material.
- 7-402 Analysis of Samples:** All samples shall be evaluated as soon after collection as possible in accordance with the procedures set forth in Sections 7-403, 7-404 and 7-405.
- 7-403 Evaluation Apparatus:** The evaluation apparatus consists of a dynamic olfactometer (variable dilution device) which accepts a field sample, dilutes it with odor-free air and conducts it to an inhalation mask at a flow rate of approximately 14 liters/minute (0.5 cfm).
- 7-404 Evaluation Procedure:** Three subjects, selected by the APCO, are seated out-of-sight of the evaluation apparatus and fitted with the inhalation mask. The subjects shall be selected in accordance with procedures approved by the APCO and which are designed to eliminate prospective subjects who have olfactory sensitivity deemed by the APCO to be unduly sensitive or unsensitive at the time of the test. A signal lamp and a signal switch are in front of each subject. The subjects are given 20 presentations, each of 5 seconds duration and 10 seconds apart, for appraisal. Half the presentations (10) are diluted field sample, and half (10) consists only of odor-free air. The presentations of sample and odor-free air are given in random order. At the time each presentation is made, each subject's response is solicited by lighting the subject's signal lamp. If the subject can detect any odor, he responds by pressing his signal switch. The operator records each subject's affirmative or negative response. If the presentation of a sample elicits an affirmative response in less than 5 seconds, odor-free air is substituted for the remainder of the 5 second

presentation period. During the 10 second relaxation period between presentations, odor-free air is supplied to the mask.

7-405

Evaluation Analysis: For the purpose of this Regulation, a diluted sample shall be deemed odorous if during evaluation as prescribed in Section 7-404 at least two of the subjects gave negative responses to at least 8 of the 10 odor-free or "blank" presentations and affirmative responses to at least 8 of the 10 sample presentations. Samples deemed to be odorous in accordance with the evaluation analysis described in this Section shall be deemed to be a violation of the limits established in Sections 7-301 and 7-302.

7-600

MANUAL OF PROCEDURES

7-601

Collection of Samples: Samples of odorous compounds specified in Section 7-303, Table II, shall be collected as prescribed in the Manual of Procedures, Volume IV, ST-1, ST-8, ST-11, ST-16, ST-22. (Amended March 17, 1982)

7-602

Sampling Equipment and Techniques for Collection: Sampling equipment and techniques for collection purposes in Section 7-401 are prescribed in the Manual of Procedures, Volume IV. (Amended March 17, 1982)

REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 8
NITROGEN OXIDES AND CARBON MONOXIDE
FROM STATIONARY INTERNAL COMBUSTION ENGINES

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 8
NITROGEN OXIDES AND CARBON MONOXIDE
FROM STATIONARY INTERNAL COMBUSTION ENGINES

(Adopted January 20, 1993)

9-8-100 GENERAL

9-8-101 Description: This rule limits the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at 50 brake horsepower or more.

9-8-110 Exemptions: The requirements of Sections 9-8-301, 302, and 502 shall not apply to the following:

110.1 Engines rated by the manufacturer at less than 250 brake horsepower output rating.

110.2 Engines fired exclusively by liquid fuels including, but not limited to, diesel fuel, gasoline, and methanol.

110.3 Engines used directly and exclusively for the growing of crops or the raising of fowl or animals.

110.4 Emergency standby engines.

9-8-111 Limited Exemption for Low Usage: The requirements of Sections 9-8-301 and 302 shall not apply to the following low use operations provided the requirements of Section 9-8-502 are met:

111.1 Engines rated at, or below, 1000 brake horsepower which operate less than 200 hours in any 12-consecutive-month period.

111.2 Engines rated above 1000 brake horsepower which operate less than 100 hours in any 12-consecutive-month period.

9-8-200 DEFINITIONS

9-8-201 Gaseous Fuels: For the purposes of this rule, gaseous fuels include, but are not limited to:

201.1 Fossil derived fuel gas such as natural gas, methane, ethane, propane, refinery fuel gas, and butane, including gases stored as liquids such as liquified petroleum gas (LPG).

201.2 Waste derived fuel gas such as sewage sludge digester gas or landfill gas.

9-8-202 Nitrogen Oxide (NO_x) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the engine exhaust, collectively expressed as nitrogen dioxide.

9-8-203 Rated Brake Horsepower: The maximum brake horsepower rating at maximum revolutions per minute (RPM) specified for the engine by the manufacturer or indicated on the engine nameplate.

9-8-204 Stationary Internal Combustion Engine (Engine): Any spark or compression ignited internal combustion engine that is operated, or intended to be operated, at a specific site for more than one year or is attached to a foundation at that site.

9-8-205 Rich-Burn Engine: Any spark or compression ignited internal combustion engine that is designed to be operated with an exhaust stream oxygen concentration of less than 4 percent, by volume. The exhaust gas oxygen content shall be determined from the uncontrolled exhaust stream.

9-8-206 Lean-Burn Engine: Any spark or compression ignited internal combustion engine that is designed to be operated with an exhaust stream oxygen concentration of 4 percent, by volume, or greater. The exhaust gas oxygen content shall be determined from the uncontrolled exhaust stream.

9-8-230 Emergency Standby Engine: Any engine that is exclusively operated:

230.1 For emergency use; and

- 230.2 For reliability-related activities.
- 9-8-231 Emergency Use:** The use of an emergency standby engine during any of the following:
- 231.1 In the event of loss of regular natural gas supply;
 - 231.2 In the event of failure of regular electric power supply;
 - 231.3 Flood mitigation;
 - 231.4 Sewage overflow mitigation;
 - 231.5 Fire;
 - 231.6 Failure of a primary motor, but only for such time as needed to repair or replace the primary motor.
- 9-8-232 Reliability-related activities:** Either:
- 232.1 Operation of an emergency standby engine to test its ability to perform for an emergency use; or
 - 232.2 Operation of an emergency standby engine during maintenance of a primary motor.
- 9-8-233 Essential Public Service:**
- 233.1 A sewage treatment facility, and associated collection system, which is publicly owned and operated;
 - 233.2 Water treatment and delivery operations;
 - 233.3 Public transit;
 - 233.4 Police or fire fighting facility;
 - 233.5 Airport runway lights; or
 - 233.6 Hospital or other medical emergency facility.
- 9-8-300 STANDARDS**
- 9-8-301 Emission Limits - Fossil Derived Fuel Gas:** Effective January 1, 1997, a person shall not operate a stationary internal combustion engine fired exclusively on fossil derived fuel gas, unless the following emission limits are met:
- 301.1 Rich-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 56 ppmv as corrected to 15% oxygen, dry basis.
 - 301.2 Lean-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 140 ppmv as corrected to 15% oxygen, dry basis.
 - 301.3 Carbon monoxide (CO) emissions shall not exceed 2000 ppmv as corrected to 15% oxygen, dry basis.
- 9-8-302 Emission Limits - Waste Derived Fuel Gas:** Effective January 1, 1997, a person shall not operate a stationary internal combustion engine fired on waste derived fuel gas or any combination of gaseous fuels and liquid fuels unless the following emission limits are met:
- 302.1 Lean-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 140 ppmv as corrected to 15% oxygen, dry basis.
 - 302.2 Rich-Burn Engines: Nitrogen oxide (NOx) emissions shall not exceed 210 ppmv as corrected to 15% oxygen, dry basis.
 - 302.3 Carbon monoxide (CO) emissions shall not exceed 2000 ppmv as corrected to 15% oxygen, dry basis.
- 9-8-330 Emergency Standby Engines, Hours of Operation:** A person may only operate an emergency standby engine under the following circumstances:
- 330.1 For emergency use for an unlimited number of hours; and
 - 330.2 For reliability-related activities so long as total hours of operation for this purpose do not exceed 100 hours in a calendar year, or limitations contained in a District permit, whichever is lower.
- 9-8-331 Essential Public Service, Hours of Operation:** An essential public service may only operate an emergency standby engine under the following circumstances:
- 331.1 For emergency use for an unlimited number of hours; and
 - 331.2 For reliability-related activities so long as total hours of operation for this purpose do not exceed 200 hours per calendar year, or limitations contained in a District permit, whichever is lower.

9-8-400 ADMINISTRATIVE REQUIREMENTS

9-8-401 Compliance Schedule: A person subject to the requirements of Section 9-8-301 or 302 shall submit an application for any Authority to Construct, necessary to achieve compliance with such requirements, by January 1, 1996, and be in compliance with all of the requirements of this rule by January 1, 1997.

9-8-500 MONITORING AND RECORDS

9-8-501 Initial Demonstration of Compliance: A person who must modify existing sources or install new control equipment shall conduct a District approved source test, pursuant to Sections 9-8-601 and 602 by March 31, 1997, for the purpose of demonstrating compliance with Section 9-8-301 or 302. Source test results shall be submitted to the District by May 31, 1997.

9-8-502 Recordkeeping: Any person who operates engines which are exempt from the requirements of Section 9-8-301 or 302 by Section 9-8-111 shall keep records of the number of hours the engines are fired on a monthly basis. Such records shall be retained for a minimum of 24 months from the date of entry and made available to District staff upon request.

9-8-530 Emergency Standby Engines, Monitoring and Recordkeeping: Each emergency standby engine shall be equipped with a non-resettable totalizing meter that measures hours of operation or fuel usage. All records shall be kept for at least two years, and shall be available for inspection by District staff upon request. The operator shall keep a monthly log of usage that shall indicate the following:

530.1 Hours of operation (total)

530.2 Hours of operation (emergency)

530.3 For each emergency, the nature of the emergency condition.

9-8-600 MANUAL OF PROCEDURES

9-8-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District's Manual of Procedures, Volume IV, ST-13 A or B.

9-8-602 Determination of Carbon Monoxide and Stack Gas Oxygen: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of carbon monoxide and stack gas oxygen are set forth in the District's Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 1
SULFUR DIOXIDE**

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**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 1
SULFUR DIOXIDE**

9-1-100 GENERAL

9-1-101 Description: This Rule establishes emission limits for sulfur dioxide from all sources including ships, and limits ground level concentrations of sulfur dioxide.

9-1-110 Conditional Exemption, Area Monitoring: The 300 ppm limitation of Section 9-1-302 shall not apply to a person who meets the requirements of subsections 9-1-110.1 and 110.2, provided such person has complied with those requirements prior to January 1, 1980.

110.1 A person shall be subject to the monitoring, records and reporting requirements contained in Regulation 1, including Sections 1-510, 530, 540, 542, 543, and 544.

110.2 A person shall not emit sulfur dioxide in quantities which result in ground level concentrations of sulfur dioxide in excess of the limits specified in Section 9-1-301. This subsection shall not apply to ground level concentrations occurring on the property from which such emission occurs, provided such property, from the emission point to the point where the excess occurs, is physically secured against public access by the person responsible for the emission.
(Amended May 20, 1992)

9-1-200 DEFINITIONS

9-1-201 Deleted May 20, 1992

9-1-202 Deleted May 20, 1992

9-1-203 Deleted May 20, 1992

9-1-204 Start-up: For the purposes of Section 9-1-605, start-up begins at the time the feed stock is introduced into the process and may proceed for a period not to exceed four consecutive hours.
(Amended May 20, 1992)

9-1-205 Fresh Fruit Sulfuring Operation: Any operation where freshly cut fruit is placed in a sulfur house in order to come into contact with sulfur dioxide.
(Adopted February 16, 1983)

9-1-206 Sulfur Removal and Recovery System: A set of process units which remove H₂S from refinery gas streams and the reduced sulfur compounds and ammonia from process water streams. The reduced sulfurous compounds are recovered as sodium hydrosulfide (NaSH), elemental sulfur, sulfuric acid, or other sulfate compounds. The sulfurous compounds are recovered as elemental sulfur or as sulfuric acid. The process units consist of a sour water stripper, regenerative gas treatment system, and a sulfur recovery plant, or a sulfuric acid plant, or other process units and facilities which achieve removal efficiencies as required by Section 9-1-313.2.

(Adopted July 18, 1990; Amended March 15, 1995)

9-1-207 Sour Water Stripper: A process unit which removes reduced sulfur compounds from process water using a distillation (stripping) process. (Adopted July 18, 1990)

9-1-208 Regenerative Gas Treatment System: A regenerative process system that removes H₂S from refinery gas streams and recovers the H₂S as H₂S or sulfur.
(Adopted July 18, 1990)

9-1-209 Sulfur Recovery Plant: A process unit which processes sulfur and ammonia containing material and produces a final product of elemental sulfur.
(Adopted July 18, 1990)

- 9-1-210 Sulfuric Acid Plant:** A process unit which processes sulfur containing material and produces a final product of sulfuric acid or oleum. (Adopted July 18, 1990)
- 9-1-211 Shutdown:** For the purposes of Section 9-1-605, shutdown begins at the time the feed stock is discontinued. (Adopted May 20, 1992)
- 9-1-300 STANDARDS**
- 9-1-301 Limitations on Ground Level Concentrations:** A person shall not emit from sources other than ships, sulfur dioxide in quantities which result in ground level concentrations in excess of 0.5 ppm continuously for 3 consecutive minutes or 0.25 ppm averaged over 60 consecutive minutes, or 0.05 ppm averaged over 24 hours. This section shall not apply to ground level concentrations occurring on the property from which such emission occurs, provided such property, from the emission point to the point where the excess occurs, is physically secured against public access by the person responsible for the emission. (Amended May 20, 1992)
- 9-1-302 General Emission Limitation:** A person shall not emit from any source, other than a ship, a gas stream containing sulfur dioxide in excess of 300 ppm (dry). This section shall not apply to the following sources:
- 302.1 Any source which is subject to any of the limitations in Sections 9-1-304 through 9-1-312.
- 302.2 Any source which satisfies the conditions in Sections 9-1-110. (Amended February 16, 1983)
- 9-1-303 Emissions from Ships:** A person shall not emit a gas stream containing sulfur dioxide in excess of 2000 ppm from any ship, except when the ship is entering the port from outside the District. Emissions resulting only from the combustion of liquid fuel with a sulfur content less than or equal to 3.34% by weight shall be considered in compliance with this Section.
- 9-1-304 Fuel Burning (Liquid and Solid Fuels):** A person shall not burn any liquid fuel having a sulfur content in excess of 0.5% by weight, or solid fuel of such sulfur content as would result in the emission of a gas stream containing more than 300 ppm (dry) of sulfur dioxide. This section shall not apply to:
- 304.1 The burning of sulfur, hydrogen sulfide, acid sludge or other compounds used in the manufacture of sulfur compounds;
- 304.2 The use of liquid or solid fuels to propel any motor vehicle, aircraft, missile, boat or ship;
- 304.3 The use of liquid or solid fuels which do not result in the emission of a gas stream containing more than 300 ppm (dry) of sulfur dioxide.
- 9-1-305 Deleted May 20, 1992**
- 9-1-306 Deleted May 20, 1992**
- 9-1-307 Emission Limitations for Sulfur Recovery Plants:** A person shall not emit, from any source in a sulfur recovery plant, effluent process gas containing sulfur dioxide in excess of 250 ppm by volume (dry) calculated at zero percent oxygen. Plants which emit less than 45 kg (100 lbs.) per day of sulfur dioxide shall not be subject to this limitation. (Amended February 16, 1983; May 20, 1992)
- 9-1-308 Deleted May 20, 1992**
- 9-1-309 Emission Limitations for Sulfuric Acid Plants:** A person shall not emit, from any source in a sulfuric acid plant, effluent process gas containing sulfur dioxide in excess of 300 ppm by volume calculated at 12% oxygen. (Amended February 16, 1983; May 20, 1992)

- 9-1-310 Emission Limitations for Fluid Catalytic Cracking Units, Fluid Cokers, and Coke Calcining Kilns:**
- 310.1 A person shall not emit, from any source in a fluid catalytic cracking unit or fluid coker, effluent process gas containing sulfur dioxide in excess of 1,000 ppm by volume.
 - 310.2 A person shall not emit, from any coke calcining kiln, effluent process gas containing sulfur dioxide in excess of 400 ppm by volume or in excess of 113 kg (250 pounds) per hour, whichever is more restrictive.
 - 310.3 A person subject to subsections 9-1-310.1 or 310.2 shall comply with the requirements in subsections 9-1-110.1 and 110.2.
- 9-1-311 Emission Limitations for Catalyst Manufacturing Plants:**
- 311.1 Deleted May 20, 1992
 - 311.2 A person shall not emit, from any source in a catalyst manufacturing plant, effluent process gas containing sulfur dioxide in excess of 22 kg (50 pounds) per hour. (Adopted May 21, 1980; Amended May 20, 1992)
- 9-1-312 Emission Limitations for Fresh Fruit Sulfuring Operations:**
- 312.1 A person shall not operate any fresh apricot sulfuring operation which uses greater than 4.5 kg (10 pounds) of elemental sulfur or 9.0 kg (20 pounds) of gaseous SO₂ per 9.0 metric ton (1 short ton) of fresh apricots.
 - 312.2 A person shall not operate any fresh peach sulfuring operation which uses greater than 5.5 kg (12 pounds) of elemental sulfur or 10.9 kg (24 pounds) of gaseous SO₂ per 9.0 metric ton (1 short ton) of fresh peaches.
 - 312.3 A person shall not operate any fresh pear sulfuring operation which uses greater than 6.8 kg (15 pounds) of elemental sulfur or 13.6 kg (30 pounds) of gaseous SO₂ per 9.0 metric ton (1 short ton) of fresh pears. (Adopted February 16, 1983; Amended May 20, 1992)
- 9-1-313 Sulfur Removal Operations at Petroleum Refineries: Effective September 1, 1990, a person shall not operate a petroleum refinery processing more than 20,000 barrels per stream day of crude oil unless one of the following is met:**
- 313.1 The sulfur content of the crude oil does not exceed 0.10 percent by weight, or
 - 313.2 There is a sulfur removal and recovery system that removes and recovers, on a refinery wide basis, 95% of the H₂S from the refinery fuel gas, that removes and recovers, on a refinery wide basis, 95% of the H₂S from the process water streams, and removes 95% of the ammonia from the process water streams, provided, however, any refinery which removes sulfurous compounds containing sulfur equivalent of 16.5 tons or more of elemental sulfur in any one day shall install a sulfur recovery plant or a sulfuric acid plant.
 - 313.3 A binding, legally enforceable agreement or court order exists which mandates the construction of a sulfur removal and recovery system pursuant to a schedule set forth therein; provided, however, that the sulfur removal and recovery system must be constructed by October 1, 1993, unless, in the judgment of the Air Pollution Control Officer, failure to complete construction by that date results from circumstances beyond the reasonable control of the refinery operator in which case the Air Pollution Control Officer may grant a reasonable extension of the October 1, 1993 deadline. The Air Pollution Control Officer may grant such extension, however, only if the refinery operator has made substantial progress in completing construction of its sulfur removal and recovery system by October 1, 1993. (Adopted July 18, 1990; Amended March 15, 1995)

9-1-400 ADMINISTRATIVE REQUIREMENTS

- 9-1-401 Deleted May 20, 1992**
- 9-1-402 Deleted May 20, 1992**
- 9-1-403 Deleted May 20, 1992**
- 9-1-404 Deleted May 20, 1992**

9-1-500 MONITORING AND RECORDS

- 9-1-501 Area Monitoring Requirements:** Upon request of the APCO, a person subject to Section 9-1-301 shall comply with the monitoring, maintenance, records, and reporting requirements of Regulation 1, including Sections 1-510, 1-530, 1-540, 1-542, 1-543 and 1-544.
- 9-1-502 Emission Monitoring Requirements:** A person subject to Section 9-1-304, 307, 309 or 310 (with the exception of coke calcining kilns), shall comply with the monitoring requirements of 1-520 and 522.
(Amended March 17, 1982; May 20, 1992)
- 9-1-503 Fresh Fruit Sulfuring Recordkeeping Requirements:** Any persons subject to Section 9-1-312 of this Rule shall record the daily weight of elemental sulfur burned or gaseous SO₂ used per unit weight of fresh fruit for each sulfuring operation. Records of the weights used shall be kept for the length of the specific fruit season and shall be made available to the APCO upon request.
(Adopted February 16, 1983)

9-1-600 MANUAL OF PROCEDURES

- 9-1-601 Sampling and Analysis of Gas Streams:** The method of sampling and analysis of gas streams of sulfur dioxide concentrations is described in the Manual of Procedures, Volume IV, ST-19 A or B.
(Amended March 17, 1982)
- 9-1-602 Sulfur Content of Fuels:** The sulfur content of solid and liquid fuels shall be determined as specified in the Manual of Procedures, Volume III, Method 10.
(Amended March 17, 1982)
- 9-1-603 Averaging Times:** The averaging times for production determination and emission analysis are specified in the Manual of Procedures, Volume IV.
(Amended March 17, 1982)
- 9-1-604 Ground Level Monitoring:** The monitoring requirements for ground level concentrations of sulfur dioxide, including siting procedures and instrument specifications, calibration and maintenance procedures, are described in the Manual of Procedures, Volume VI, Section 1.
(Amended March 17, 1982)
- 9-1-605 Emission Monitoring:** The emission monitoring requirements, including instrument placement, specifications, calibration, and maintenance procedures are described in the Manual of Procedures, Volume V.
(Amended March 17, 1982).
- 9-1-606 Analysis of Gas Streams for H₂S:** The method for analyzing refinery fuel gas streams for H₂S before and after control shall be as prescribed in the Manual of Procedures, Volume III, LAB 32 or equivalent method approved by the APCO.
Adopted July 18, 1990; Amended May 20, 1992)
- 9-1-607 Analysis of Water Streams for H₂S:** The method for analyzing refinery process water streams for H₂S before and after control shall be as prescribed in the Manual of Procedures, Volume III, LAB 32 or equivalent method approved by the APCO.
(Adopted July 18, 1990; Amended May 20, 1992)
- 9-1-608 Analysis of Water Streams for NH₃:** The method for analyzing refinery process water streams for NH₃ before and after control shall be as prescribed in the Manual of Procedures, Volume III, LAB 1 or equivalent method approved by the APCO.
Adopted July 18, 1990; Amended May 20, 1992)

9-1-609 Analysis of Sulfur Content of Crude Oil: The method for analyzing the sulfur content of the crude oil shall be as prescribed in the Manual of Procedures, Volume III, Method LAB 10 or equivalent method approved by the APCO.
(Adopted July 18, 1990; Amended May 20, 1992)

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 2
HYDROGEN SULFIDE**

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**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 2
HYDROGEN SULFIDE**

9-2-100 GENERAL

9-2-101 Description: This rule limits ground level concentrations of hydrogen sulfide (H₂S). Persons subject to this Rule may also be subject to the requirements of Regulation 7: Odorous Substances, and Regulation 12: Kraft Pulp Mills.

9-2-110 Exemptions: The limitations of this Rule shall not apply to concentrations of hydrogen sulfide occurring on the property where the emissions occur providing that such property, from the emission point to the point of any such concentrations, is controlled by the person responsible for the emission.

9-2-300 STANDARDS

9-2-301 Limitations on Hydrogen Sulfide: A person shall not emit during any 24 hour period, hydrogen sulfide in such quantities as to result in ground level concentrations in excess of 0.06 ppm averaged over three consecutive minutes or 0.03 ppm averaged over any 60 consecutive minutes.

9-2-500 MONITORING AND RECORDS

9-2-501 Area Monitoring Requirements: The APCO may require any person emitting hydrogen sulfide from any source to comply with the monitoring, maintenance, records and reporting requirements of Regulation 1, including Sections 1-510, 1-530, 1-540, 1-542, 1-543, and 1-544. The APCO shall notify the affected person in writing that this requirement is being imposed. (Amended October 6, 1999)

9-2-600 MANUAL OF PROCEDURES

9-2-601 Ground Level Monitoring: The monitoring requirements for ground level concentrations of hydrogen sulfide, including siting procedures and instrument specifications, calibration and maintenance procedures, are described in the Manual of Procedures, Volume VI, Section 1. (Amended March 17, 1982)

REGULATION 9
INORGANIC GASEOUS POLLUTANTS
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NITROGEN OXIDES FROM HEAT TRANSFER OPERATIONS
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REGULATION 9
INORGANIC GASEOUS POLLUTANTS

RULE 3

NITROGEN OXIDES FROM HEAT TRANSFER OPERATIONS

9-3-100 GENERAL

9-3-101 Description: This rule limits the emission of nitrogen oxides from existing heat transfer operations and from new or modified heat transfer operations.

9-3-200 DEFINITIONS

9-3-201 New heat Transfer Operation: Any heat transfer operation for which an authority to construct has been issued by the District after April 19, 1975.

9-3-202 Modified heat Transfer Operation: Any heat transfer operation which has been changed so as to result in an increase in the emission of nitrogen oxides. The following shall not be regarded as a change within the meaning of this section:

202.1 Any alterations or changes in the methods of operation which do not require an authority to construct (see Regulation 2);

202.2 The addition or use of any air pollution control equipment

(Amended December 17, 1980)

9-3-300 STANDARDS

9-3-301 Existing Heat Transfer Operation Limits: A person shall not emit, from any existing heat transfer operation designed for a maximum heat input of 1850 GJ (1.75 billion BTU) per hour or more, nitrogen oxides in excess of 175 ppm when gaseous fuel is burned or 300 ppm when liquid fuel is burned.

9-3-302 Different Fuels in Existing Heat Transfer Operations: When different fuels are burned simultaneously in any combination, the applicable standard shall be obtained by proration. The limits shall be determined by use of the following formula: allowable emissions = $X(175) + Y(300)$, where X is the fraction of total heat input from gaseous fuel, and Y is the fraction of total heat input derived from liquid fuel.

9-3-303 New or Modified heat Transfer Operation Limits: A person shall not emit from any new or modified heat transfer operation designed for a maximum heat input of 264 GJ (250 million BTU) per hour or more, nitrogen oxide in excess of 125 ppm when gaseous fuel is burned or 225 ppm when liquid fuel is burned.

9-3-304 Different Fuels in New or Modified Heat Transfer Operation: The limits shall be determined by use of the following formula: allowable emissions = $X(125) + Y(225)$, where X is the fraction of total heat input from gaseous fuel, and Y is the fraction of total heat input derived from liquid fuel.

9-3-600 MANUAL OF PROCEDURES

9-3-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the Manual of Procedures, Volume IV, ST-13 A or B

(Amended March 17, 1982)

REGULATION 9
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RULE 4

NITROGEN OXIDES FROM FAN TYPE RESIDENTIAL CENTRAL FURNACES

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 4

NITROGEN OXIDES FROM FAN TYPE RESIDENTIAL CENTRAL FURNACES

9-4-100 GENERAL

9-4-101 Description: This Rule limits emissions of nitrogen oxides from natural gas-fired fan type residential central furnaces. (Amended December 7, 1983)

9-4-200 DEFINITIONS

9-4-201 Fan Type Central Furnace: A self-contained space heater providing for circulation of heated air at pressures other than atmospheric through ducts more than 25 cm (10 in) in length with an input rate of less than 175,000 BTU/hr, excluding heating/cooling units utilizing three phase electric current.

(Amended December 7, 1983)

9-4-202 Annual Fuel Utilization Efficiency: The efficiency as defined by Section 4.2.35 of the Code of Federal Regulations, Title 10, Part 430, Subpart B, Appendix N.

(Amended December 7, 1983)

9-4-203 Useful Heat Delivered to the Heated Space: The Annual Fuel utilization efficiency (expressed as a fraction) multiplied by the heat input.

(Amended December 7, 1983)

9-4-300 STANDARDS

9-4-301 Residential Central Furnaces: A person shall not sell, install or offer for sale within the District any stationary residential natural gas-fired fan type central furnace manufactured after January 1, 1984 that emits more than 40 nanograms of oxides of nitrogen expressed as NO₂ per joule of useful heat delivered to the heated space.

(Amended December 7, 1983)

9-4-302 Certified Furnaces: A person shall not sell, install or offer for sale within the District furnaces subject to the requirements of Section 9-4-301 unless such furnaces are certified in accordance with Section 9-4-401, 402, 403, and 404.

(Amended and Renumbered December 7, 1983)

9-4-400 ADMINISTRATIVE REQUIREMENTS

9-4-401 Certification: The manufacturer shall have each appliance model tested in accordance with the following:

401.1 Oxides of nitrogen measurements, test equipment, and other required test procedures shall be in accordance with methods and standards or equivalent procedures approved by the APCO.

401.2 Operation of the furnace shall be in accordance with the procedures specified in Section 3.1 of Code of Federal Regulations, Title 10, part 430, Subpart B, Appendix N.

401.3 The following calculation shall be used to determine the nanograms of NO_x per joule of useful heat delivered to heated space:

$$\frac{(3.655 \times 10^{10})P}{N = (20.9 - Y) ZE} \quad \text{or} \quad N = \frac{4.566 \times 10^4 \times P \times U}{H \times C \times E}$$

Where:

- N= Nanograms of NO_x emitted per joule of useful heat delivered to the heated space.
P= Parts per million of NO_x
Y= Percentage of O_2 in flue gas.
Z= Heating value of gas in joules per (meter)³
E= AFUE (percentage).
U= Volume percent CO_2 in water-free flue gas for stoichiometric combustion.
H= Gross heating value of the fuel, BTU/cu. ft. (60°F, 30-in Hg.)
C= Measured volume percent of CO_2 in water-free flue gas, assuming complete combustion and no CO present. (Amended December 7, 1983)

- 9-4-402 **Compliance Statement:** The manufacturer shall submit to the APCO a statement that the model is in compliance with this Rule. The statement shall be signed and dated, and shall attest to the accuracy of all information. The statement shall include the brand name, model number as is appears on the furnace rating plate, and be on forms provided by the APCO. (Amended December 7, 1983)
- 9-4-403 **Identification:** The manufacturer shall display the model number of the furnace complying with this rule on the shipping carton and rating plate.
- 9-4-404 **Enforcement:** The APCO may require the emission test results to be provided when deemed necessary to verify compliance and may periodically conduct such tests as are deemed necessary to insure compliance.

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INORGANIC GASEOUS POLLUTANTS
RULE 5
HYDROGEN SULFIDE FROM GEOTHERMAL POWER PLANTS
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REGULATION 9

INORGANIC GASEOUS POLLUTANTS

RULE 5

HYDROGEN SULFIDE FROM GEOTHERMAL POWER PLANTS

9-5-100 GENERAL

9-5-101 Description: The purpose of this Rule is to reduce emissions of hydrogen sulfide (H_2S) from geothermal power plants and associated operations.

9-5-110 Exemption, Alternative Limits: The requirements of Section 9-5-302 or 303 shall not apply to any operation which complies with alternative limitations approved by the APCO and satisfies the following conditions:

110.1 The operator shall submit written application for alternative limits to the APCO.

110.2 The operator shall demonstrate to the satisfaction of the APCO that the controls required in Section 9-5-302 or 303 are not necessary to prevent violations of California or federal ambient air quality standards or other District regulations.

110.3 The operator shall identify alternative control requirements or emission limits which are adequate to prevent violations of state or federal air quality standards or other District regulations.

110.4 The APCO may terminate such exemption if he deems such action necessary to prevent violation of state or federal air quality standards or other District regulations.

110.5 Failure to comply with approved alternative limitations or requirements shall constitute a violation of this Rule.

9-5-200 DEFINITIONS

9-5-201 Full Power H_2S Flow: the amount of H_2S contained in the steam supplied to a geothermal power plant while operating at full rated capacity.

9-5-202 Gross Megawatt-Hour (MwHr): The gross amount of electrical generating capacity of a power plant as guaranteed by the turbine generator manufacturer, prior to internal plant requirements, expressed in megawatt-hours.

9-5-203 Miscellaneous Steam Supply Operation: Any operation associated with providing steam for a geothermal power plant, excluding well drilling, well reworking, well testing and well bleeds.

9-5-204 Steam Stacking: Venting of steam to the atmosphere during a shutdown or outage at a geothermal power plant.

9-5-300 STANDARDS

9-5-301 Geothermal Power Plant: A person shall not emit more than 100 grams of H_2S per MwHr from any geothermal power plant.

9-5-302 Miscellaneous Steam Supply Operations: A person shall not emit more than 1.0 kilogram of H_2S per hour from any miscellaneous steam supply operation.

9-5-303 Geothermal Wells: A person shall not emit more than 2.5 kilograms of H_2S per hour from any geothermal well.

- 9-5-304** **Shutdowns and Outages:** A person shall reduce H_2S emissions from steam stacking during a shutdown or outage at a geothermal power plant to no more than 35% of the full power H_2S flow in accordance with the following schedule:
- 304.1 In a scheduled outage, such reduction shall be accomplished within one hour.
- 304.2 In an unscheduled outage, such reduction shall be accomplished within four hours.

9-5-600 **MANUAL OF PROCEDURES**

- 9-5-601** **Sampling and Analysis of Gas Streams:** The method of sampling and analysis of gas streams for hydrogen sulfide is prescribed in the Manual of Procedures, Volume IV, ST-281. (Adopted March 17, 1982)

REGULATION 9
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RULE 6
NITROGEN OXIDES EMISSIONS FROM
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INORGANIC GASEOUS POLLUTANT
RULE 6
NITROGEN OXIDES EMISSIONS FROM
NATURAL GAS-FIRED WATER HEATERS
(ADOPTED APRIL 1, 1992)

9-6-100 GENERAL

- 9-6-101 Description:** This rule limits the emissions of nitrogen oxides from natural gas-fired water heaters.
- 9-6-110 Exemptions:** The requirements of Section 9-6-301 shall not apply to the following:
- 110.1** Natural gas-fired water heaters with an input rating of greater than 75,000 BTU per hour.
 - 110.2** Natural gas-fired water heaters used in recreational vehicles.
 - 110.3** Water heaters using a fuel other than natural gas.
 - 110.4** Natural gas-fired water heaters used exclusively to heat swimming pools and hot tubs.

9-6-200 DEFINITIONS

- 9-6-201 Natural Gas-Fired Water Heater:** A closed vessel, in which water is heated by the combustion of natural gas and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 °F.
- 9-6-202 Natural Gas:** A mixture of gaseous hydrocarbons containing at least 80 percent methane by volume as determined according to Standard Method ASTM D1945-64.
- 9-6-203 Heat Output:** The product obtained by multiplying the recovery efficiency, as defined by Section 6.1.3 of the Code of Federal Regulation, Title 10, Part 430, Subpart B, Appendix E, by the input rating of the water heater.
- 9-6-204 Input Rating:** The amount of energy a water heater consumes in one hour (BTU/Hour).

9-6-300 STANDARDS

- 9-6-301 Natural Gas-Fired Water Heaters with an Input Rating of 75,000 BTU/Hour or Less:** A person shall not sell, install, or offer for sale within the District any natural gas-fired water heater, manufactured after July 1, 1992, with an input rating of 75,000 BTU/Hour or less, that emits more than 40 nanograms of nitrogen oxides (calculated as NO₂) per joule of heat output.
- 9-6-302 Certification of Water Heaters:** Water heaters subject to Section 9-6-301 shall be certified in accordance with Sections 9-6-401, 402, and 403.

9-6-400

ADMINISTRATIVE REQUIREMENTS

9-6-401

Certification: The manufacturer shall demonstrate that each water heater model subject to the requirements of Section 9-6-301 has been tested in accordance with the following procedures:

401.1 The measurement of nitrogen oxides emissions shall be conducted in accordance with the Manual of Procedures, Volume IV, Method ST-13B or EPA Reference Method RM-7 (40 CFR Part 60, Appendix A, Test Method 7, including 7A-E).

401.2 Each tested water heater shall be operated in accordance with Section 2.4 of American National Standards ANSI Z21.10.1-1990 at normal test pressure, input rates, and with a five-foot exhaust stack installed during the nitrogen oxides emissions tests.

401.3 The following procedure shall be used to calculate the NO_x emission rate in nanograms of NO_x per joule of heat output:

$$N = (4.566 \times 10^4 \times P \times U) / (H \times C \times E)$$

Where:

N = NO_x Emission Rate in nanograms of NO_x emitted per joule of heat output

P = Concentration of NO_x in the flue gas in parts per million (volume)

U = Dry volume percent of CO₂ in flue gas necessary for stoichiometric combustion.

H = Gross heating value of the gas, BTU/Cu Ft (at 60 °F and 30" Hg)

C = Dry volume percent of CO₂ in flue gas

E = Recovery efficiency, percentage, as defined in Section 6.1.3 of the Code of Federal Regulation, Title 10, Part 430, Subpart B, Appendix E.

401.4 The manufacturer may submit to the District an approved SCAQMD certification in lieu of conducting duplicative certification tests.

9-6-402

Compliance Statement: Each manufacturer shall submit to the APCO a statement certifying that water heaters subject to this rule are in compliance with the provisions of Section 9-6-301. The statement shall be signed, dated, and attest to the accuracy of all information. The statement shall include the brand name, model number, and the input rating as it appears on the water heater rating plate. The manufacturer shall inform their wholesaler and/or retailer of the District's certification requirement.

9-6-403

Identification: The water heater manufacturer shall display the model number of a water heater complying with this rule on the shipping carton and on the rating plate of each unit.

9-6-600

MANUAL OF PROCEDURES

9-6-601

Determination of Emissions: Emissions of oxides of nitrogen from water heaters subject to Section 9-6-301 shall be measured as prescribed in the Manual of Procedures, Volume IV, Section St-13B or EPA Reference Method RM-7 (40 CFR Part 60, Appendix A, Test Method 7, including 7A-E).

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 7
NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL,
INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND
PROCESS HEATERS**

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 7
NITROGEN OXIDES AND CARBON MONOXIDE FROM INDUSTRIAL,
INSTITUTIONAL, AND COMMERCIAL BOILERS, STEAM GENERATORS, AND
PROCESS HEATERS

(ADOPTED SEPTEMBER 16, 1992)

9-7-100 GENERAL

9-7-101 Description: This rule limits the emissions of nitrogen oxides and carbon monoxide from industrial, institutional, and commercial boilers, steam generators, and process heaters.

9-7-110 Exemptions: The requirements of this rule shall not apply to the following:

110.1 Boilers, steam generators, and process heaters with a rated heat input less than 10 million BTU/hour, if fired exclusively with natural gas, liquefied petroleum gas, or any combination thereof.

110.2 Boilers, steam generators and process heaters with a rated heat input less than 1 million BTU/hour fired with any fuel.

110.3 Boilers, steam generators, and process heaters that are used in petroleum refineries.

110.4 Boilers used by public electric utilities or qualifying small power production facilities, as defined in Section 228.5 of the Public Utilities Code, to generate electricity;

110.5 Waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines or reciprocating internal combustion engines;

110.6 Kilns, ovens, and furnaces used for drying, baking, heat treating, cooking, calcining, or vitrifying.

9-7-111 Limited Exemption, Low Fuel Usage: The requirements of Sections 9-7-301, 302, and 303 shall not apply to the use of any boiler, steam generator, or process heater with an annual heat input less than 90,000 therms during each consecutive 12-month period after July 1, 1993, or that accepts a limiting condition in their operating permit to limit the annual heat input to less than 90,000 therms, provided the requirements of Sections 9-7-304 and 504 are satisfied.

9-7-200 DEFINITIONS

9-7-201 Annual Heat Input: The total heat input of fuels burned by a combustion source during any consecutive 12-month period, as determined from the higher heating value and cumulative annual usage of each fuel.

9-7-202 Boiler or Steam Generator: Any combustion equipment used to produce steam or to heat water.

9-7-203 British Thermal Unit (BTU): The amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.

9-7-204 Heat Input: The heat of combustion released due to burning a fuel in a source, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.

- 9-7-205 Heat-Input Weighted Average:** The heat input of the gaseous fuel per unit time divided by the total heat input per unit time and the heat input per unit time of the non-gaseous fuel divided by the total heat input per unit time. The calculated fractions are used to calculate the applicable weighted average ppmv emission limit of Section 9-7-303.
- 9-7-206 Higher Heating Value (HHV):** The total heat liberated per mass of fuel burned (BTU per pound), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. The HHV is determined as specified in Section 9-7-605.
- 9-7-207 Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.
- 9-7-208 Nitrogen Oxide (NO_x) Emissions:** The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- 9-7-209 Non-Gaseous Fuel:** Any fuel which is not a gas at 68°F and one atmosphere.
- 9-7-210 Process Heater:** Any combustion equipment which transfers heat from combustion gases to water or process streams. A process heater does not include any kiln, furnace, or oven used for drying, baking, heat treating, cooking, calcining, or vitrifying.
- 9-7-211 Rated Heat Input:** The heat input capacity specified on the nameplate of the combustion source. If the combustion source has been physically modified such that its maximum heat input is different than the heat input capacity specified on the nameplate, the modified maximum heat input, per Section 9-7-502, shall be considered as the rated heat input.
- 9-7-212 Therm:** One hundred thousand (100,000) BTU's.
- 9-7-300 STANDARDS**
- 9-7-301 Emission Limits - Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater with a rated heat input greater than or equal to 10 million BTU per hour, fired on gaseous fuel, unless the following emission limits are met:
- 301.1 Nitrogen oxides (NO_x) shall not exceed 30 ppmv, dry at 3 percent oxygen;
 - 301.2 Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
- 9-7-302 Emission Limits - Non-Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater, with a rated heat input greater than or equal to 10 million BTU per hour, fired on non-gaseous fuel, unless the following emission limits are met:
- 302.1 Nitrogen oxides (NO_x) shall not exceed 40 ppmv, dry at 3 percent oxygen;
 - 302.2 Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
- 9-7-303 Emission Limits - Gaseous and Non-Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater, with a rated heat input greater than or equal to 10 million BTU per hour, fired simultaneously on combinations of gaseous and non-gaseous fuels, unless the heat-input weighted average of the emission limits specified in subsections 9-7-301.1, 301.2, 302.1, and 302.2 are not exceeded.

- 9-7-304 Low Fuel Usage Requirements:** Effective January 1, 1996, a person who operates any boiler, steam generator, or process heater with rated heat input greater than or equal to 10 million BTU per hour and qualifying for the limited exemption in Section 9-7-111, or with rated heat input less than 10 million BTU per hour with the capability of firing any fuel other than natural gas or liquefied petroleum gas, shall meet one of the following conditions:
- 304.1** Operate in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3 percent by volume on a dry basis; or
 - 304.2** Tune at least once every twelve months by a technician in accordance with the procedure specified in Section 9-7-604; or
 - 304.3** Meet the emission limits specified in Sections 9-7-301, 302, or 303.
- 9-7-305 Natural Gas Curtailment - Non-Gaseous Fuel:** Effective January 1, 1996, if natural gas is unavailable for use, a person shall not operate a boiler, steam generator, or process heater, fired on non-gaseous fuel, unless the following emission limits are met:
- 305.1** Nitrogen oxides (NOx) shall not exceed 150 ppmv, dry at 3 percent oxygen;
 - 305.2** Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
- 9-7-306 Equipment Testing - Non-Gaseous Fuel:** Effective January 1, 1996, a person shall not operate a boiler, steam generator, or process heater, fired on non-gaseous fuel for equipment testing, unless the following limits are met:
- 306.1** Nitrogen oxides (NOx) shall not exceed 150 ppmv, dry at 3 percent oxygen.
 - 306.2** Carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen.
 - 306.3** Equipment testing shall not exceed a combined total of 48 hours during any calendar year.

9-7-400 ADMINISTRATIVE REQUIREMENTS

- 9-7-401 Compliance Schedule - Emissions and Usage Limits:** A person who must modify existing sources or equipment to comply with the requirements of Sections 9-7-301, 302, 303, 305, or 306 shall comply with the following increments of progress:
- 401.1** By January 1, 1994: Submit an application for any required Authority to Construct to achieve compliance with such requirements.
 - 401.2** By January 1, 1995: Submit a status report to the APCO stating the progress of the modification or installation.
 - 401.3** By January 1, 1996: Be in compliance with all the requirements of this rule.
- 9-7-402 Compliance Schedule - Low Fuel Usage Requirements:** A person who must comply with the requirements of Section 9-7-304 shall comply with the following increments of progress:
- 402.1** By January 1, 1995: Submit a plan for approval by the APCO containing the following items:
 - 1.1** A list of all sources with the rated heat input capacities and anticipated annual heat inputs; and
 - 1.2** A selection of one of the three options specified in subsections 9-7-304.1, 304.2, and 304.3.
 - 402.2** By January 1, 1996: Be in compliance with all the requirements of this rule.

9-7-403 Initial Demonstration of Compliance: By July 1, 1996, any person subject to this rule shall conduct source tests, as specified in Sections 9-7-601 or 602, for the purpose of demonstrating compliance with Sections 9-7-301, 302, 303, or subsection 9-7-304.1.

9-7-500 MONITORING AND RECORDS

9-7-501 Combinations of Different Fuels: Any person who simultaneously fires combinations of different fuels in a source with a rated heat input greater than or equal to 10 million BTU per hour and is subject to the requirements of Section 9-7-303 shall install a non-resettable totalizing fuel meter in each fuel line for each source.

9-7-502 Modified Maximum Heat Input: Any person who operates a boiler, steam generator, or process heater that has been physically modified such that its maximum heat input is different than the heat input specified on the nameplate shall demonstrate to the APCO the maximum heat input by a fuel meter, while operating the source at maximum capacity.

9-7-503 Records: Any person subject to the requirements of this rule shall keep records of the following:

503.1 Documentation verifying annual tune-ups performed in accordance with subsection 9-7-304.2.

503.2 In the event that natural gas is unavailable for use, documentation from the natural gas supplier verifying that natural gas was unavailable due to a natural gas curtailment.

503.3 Documentation verifying the hours of equipment testing during each calendar month to demonstrate compliance with subsection 9-7-306.3.

503.4 The results of any source testing required by Section 9-7-403.

Such records shall be retained for a minimum of 24 months from date of entry and be made available to District staff upon request.

9-7-504 Low Fuel Usage - Monitoring and Records: Any person who operates boilers, steam generators, or process heaters with rated heat inputs greater than or equal to 10 million BTU per hour and qualifying for the limited exemption of Section 9-7-111 shall comply with the following requirements:

504.1 Install by July 1, 1993, a non-resettable totalizing meter for each fuel that demonstrates that the source operated at or below the applicable heat input level, or receive APCO approval for using utility service meters, purchase or tank fill records, or any other acceptable methods for measuring the cumulative annual usage of each fuel; and

504.2 Have available for inspection by the APCO by July 1, 1994, and each year thereafter, annual fuel use data and the Higher Heating Value of each fuel used, for the preceeding consecutive 12-month period. Records shall be maintained and made accesible to the APCO for a period of 24 months from the date the record is made.

9-7-600 MANUAL OF PROCEDURES

9-7-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District Manual of Procedures, Volume IV, ST-13 A or B.

- 9-7-602 Determination of Carbon Monoxide and Stack-Gas Oxygen:** Compliance with the carbon monoxide emission requirements of Section 9-7-301 and the stack-gas oxygen concentration requirement of subsection 9-7-302.1 shall be determined as set forth in the District Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).
- 9-7-603 Compliance Determination:** All emission determinations shall be made in the as-found operating condition, except that emission determinations shall include at least one source test conducted at the rated heat input of the source, and no compliance determination shall be established within two hours after a continuous period in which fuel flow to the unit is zero or is shut off for 30 minutes or longer.
- 9-7-604 Tune-Up Procedures:** The tuning procedure required by Section 9-7-304.2 shall be performed in accordance with the procedure set forth in the District Manual of Procedures, Volume I, Chapter 5. (Adopted September 15, 1993)
- 9-7-605 Determination of Higher Heating Value:** If certification of the Higher Heating Value is not provided by the third-party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88, or ASTM D1945-81 in conjunction with ASTM D3588-89, for gaseous fuels.

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 8
NITROGEN OXIDES AND CARBON MONOXIDE
FROM STATIONARY INTERNAL COMBUSTION ENGINES**

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 8
NITROGEN OXIDES AND CARBON MONOXIDE
FROM STATIONARY INTERNAL COMBUSTION ENGINES
(Adopted January 20, 1993)

9-8-100 GENERAL

9-8-101 Description: This rule limits the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines fired on gaseous fuels or any combination of gaseous and liquid fuels. This rule does not apply to emergency standby engines excluded under Regulation 1-110.2.

9-8-110 Exemptions: The requirements of this rule shall not apply to the following:

110.1 Engines rated by the manufacturer at less than 250 brake horsepower output rating.

110.2 Engines fired exclusively by liquid fuels including, but not limited to, diesel fuel, gasoline, and methanol.

110.3 Engines used directly and exclusively for the growing of crops or the raising of fowl or animals.

9-8-111 Limited Exemption for Low Usage: The requirements of Sections 9-8-301 and 302 shall not apply to the following low use operations provided the requirements of Section 9-8-502 are met:

111.1 Engines rated at, or below, 1000 brake horsepower which operate less than 200 hours in any 12-consecutive-month period.

111.2 Engines rated above 1000 brake horsepower which operate less than 100 hours in any 12-consecutive-month period.

9-8-200 DEFINITIONS

9-8-201 Gaseous Fuels: For the purposes of this rule, gaseous fuels include, but are not limited to:

201.1 Fossil derived fuel gas such as natural gas, methane, ethane, propane, refinery fuel gas, and butane, including gases stored as liquids such as liquified petroleum gas (LPG).

201.2 Waste derived fuel gas such as sewage sludge digester gas or landfill gas.

9-8-202 Nitrogen Oxide (NO_x) Emissions: The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the engine exhaust, collectively expressed as nitrogen dioxide.

9-8-203 Rated Brake Horsepower: The maximum brake horsepower rating at maximum revolutions per minute (RPM) specified for the engine by the manufacturer or indicated on the engine nameplate.

9-8-204 Stationary Internal Combustion Engine (Engine): Any spark or compression ignited internal combustion engine that is operated, or intended to be operated, at a specific site for more than one year or is attached to a foundation at that site.

9-8-205 Rich-Burn Engine : Any spark or compression ignited internal combustion engine that is designed to be operated with an exhaust stream oxygen concentration of less than 4 percent, by volume. The exhaust gas oxygen content shall be determined from the uncontrolled exhaust stream.

9-8-206 Lean-Burn Engine : Any spark or compression ignited internal combustion engine that is designed to be operated with an exhaust stream oxygen concentration of 4 percent, by volume, or greater. The exhaust gas oxygen content shall be determined from the uncontrolled exhaust stream.

9-8-300 STANDARDS

- 9-8-301 Emission Limits - Fossil Derived Fuel Gas:** Effective January 1, 1997, a person shall not operate a stationary internal combustion engine fired exclusively on fossil derived fuel gas, unless the following emission limits are met:
- 301.1 Rich-Burn Engines:** Nitrogen oxide (NOx) emissions shall not exceed 56 ppmv as corrected to 15% oxygen, dry basis.
 - 301.2 Lean-Burn Engines:** Nitrogen oxide (NOx) emissions shall not exceed 140 ppmv as corrected to 15% oxygen, dry basis.
 - 301.3 Carbon monoxide (CO) emissions** shall not exceed 2000 ppmv as corrected to 15% oxygen, dry basis.
- 9-8-302 Emission Limits - Waste Derived Fuel Gas:** Effective January 1, 1997, a person shall not operate a stationary internal combustion engine fired on waste derived fuel gas or any combination of gaseous fuels and liquid fuels unless the following emission limits are met:
- 302.1 Lean-Burn Engines:** Nitrogen oxide (NOx) emissions shall not exceed 140 ppmv as corrected to 15% oxygen, dry basis.
 - 302.2 Rich-Burn Engines:** Nitrogen oxide (NOx) emissions shall not exceed 210 ppmv as corrected to 15% oxygen, dry basis.
 - 302.3 Carbon monoxide (CO) emissions** shall not exceed 2000 ppmv as corrected to 15% oxygen, dry basis.

9-8-400 ADMINISTRATIVE REQUIREMENTS

- 9-8-401 Compliance Schedule:** A person subject to the requirements of Section 9-8-301 or 302 shall submit an application for any Authority to Construct, necessary to achieve compliance with such requirements, by January 1, 1996, and be in compliance with all of the requirements of this rule by January 1, 1997.

9-8-500 MONITORING AND RECORDS

- 9-8-501 Initial Demonstration of Compliance:** A person who must modify existing sources or install new control equipment shall conduct a District approved source test, pursuant to Sections 9-8-601 and 602 by March 31, 1997, for the purpose of demonstrating compliance with Section 9-8-301 or 302. Source test results shall be submitted to the District by May 31, 1997.
- 9-8-502 Recordkeeping:** Any person who operates engines which are exempt from the requirements of Section 9-8-301 or 302 by Section 9-8-111 shall keep records of the number of hours the engines are fired on a monthly basis. Such records shall be retained for a minimum of 24 months from the date of entry and made available to District staff upon request.

9-8-600 MANUAL OF PROCEDURES

- 9-8-601 Determination of Nitrogen Oxides:** The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District's Manual of Procedures, Volume IV, ST-13 A or B.
- 9-8-602 Determination of Carbon Monoxide and Stack Gas Oxygen:** The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of carbon monoxide and stack gas oxygen are set forth in the District's Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 9
NITROGEN OXIDES FROM STATIONARY
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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 9
NITROGEN OXIDES FROM STATIONARY
GAS TURBINES
(Adopted May 5, 1993)

9-9-100 GENERAL

9-9-101 Description: The purpose of this Rule is to limit emissions of nitrogen oxides (NO_x) from stationary gas turbines.

9-9-110 Exemption, Small Gas Turbines: This Rule shall not apply to stationary gas turbines with a power rating less than 0.3 megawatts (MW).

9-9-111 Exemption, General: The requirements of this Rule shall not apply to:

111.1 Testing of aircraft gas turbine engines for flight certification.

111.2 Gas turbines used solely for firefighting and/or flood control.

111.3 Emergency standby gas turbines excluded under Regulation 1-110.2

9-9-112 Limited Exemption, Low Usage: The requirements of this Rule shall not apply to the operation of gas turbines rated less than 4.0 MW which operate less than 877 hours per year, provided the requirements of Section 9-9-502 are satisfied.

9-9-113 Exemption, Inspection and Maintenance Periods: The emission limits of Sections 9-9-301, 303, and 304 shall not apply during inspection and maintenance periods, with the following limitations:

113.1 Inspection and maintenance periods shall be limited to a total of 48 hours between May 1 and October 31 in a calendar year.

113.2 For a calendar year in which a boiler inspection required by California Labor Code Section 7682 is not performed, inspection and maintenance periods shall be limited to a total of 144 hours.

113.3 For a calendar year in which a boiler inspection required by California Labor Code Section 7682 is performed, inspection and maintenance periods shall be limited to 144 hours plus additional time required for the boiler inspection, provided, however, that the additional time shall not cause the calendar-year total of all inspection and maintenance periods to exceed 312 hours.

(Adopted September 21, 1994)

9-9-114 Exemption, Start-up and Shutdown Periods: The emission limits of Sections 9-9-301, 302, 303, 304, and 305 shall not apply during start-up or shutdown periods.

(Adopted September 21, 1994)

9-9-200 DEFINITIONS

9-9-201 EFF: Thermal efficiency.

9-9-202 Essential Gas Turbine: A gas turbine which cannot be taken out of service without shutting down the process unit which it serves. (Adopted September 21, 1994)

9-9-203 HHV: The higher heating value of fuel. (Renumbered September 21, 1994)

9-9-204 LHV: The lower heating value of fuel. (Renumbered September 21, 1994)

9-9-205 Inspection and Maintenance Period: A period of time during which the boiler associated with an essential gas turbine is taken out of service for inspection or maintenance and during which gas turbine emissions are vented to a bypass stack rather than through the boiler to the SCR unit. (Adopted September 21, 1994)

9-9-206 Natural Gas: Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.

(Adopted September 21, 1994)

- 9-9-207 Nitrogen Oxide (NO_x) Emissions:** The sum of nitric oxide and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
(Adopted September 21, 1994)
- 9-9-208 Non-Gaseous Fuel:** Any fuel which is not a gas at 68° F and one atmosphere.
(Adopted September 21, 1994)
- 9-9-209 Power Augmentation:** An increase in the gas turbine shaft output or the decrease in turbine fuel consumption by the addition of energy recovered from exhaust heat.
(Renumbered September 21, 1994)
- 9-9-210 Rating:** The continuous megawatt (MW) rating or mechanical equivalent by a manufacturer for gas turbine(s) without power augmentation.
(Renumbered September 21, 1994)
- 9-9-211 Refinery Fuel Gas:** A mixture of hydrogen and gaseous hydrocarbons generated by petroleum refinery processes and used by the refinery for on-site combustion in boilers, process heaters, turbines, and other combustion equipment.
(Adopted September 21, 1994)
- 9-9-212 SCR: Selective Catalytic Reduction.** (Renumbered September 21, 1994)
- 9-9-213 Shutdown Period:** A period of time, not to exceed one hour, during which a gas turbine is brought from normal operating power output to inactive status.
(Adopted September 21, 1994)
- 9-9-214 Start-up Period:** A period of time, not to exceed three hours, during which a gas turbine is brought from inactive status to normal operating power output.
(Amended September 21, 1994)
- 9-9-215 Stationary Gas Turbine:** Any gas turbine system which is attached to a foundation and is gas and/or liquid fueled with or without power augmentation. Two or more gas turbines powering one shaft shall be treated as one unit.
(Renumbered September 21, 1994)
- 9-9-300 STANDARDS**
- 9-9-301 Emission Limits, General:** Except as provided by Sections 9-9-302, 9-9-303, 9-9-305, or 9-9-401, effective January 1, 1997, a person shall not operate a stationary gas turbine unless nitrogen oxides (NO_x) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed the compliance limit listed below:
- 301.1 Gas turbines rated at 0.3 MW to less than 10.0 MW shall not exceed 42 ppmv, except that, for refinery fuel gas firing, the limit shall be 55 ppmv, and for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 65 ppmv.
 - 301.2 Gas turbines rated at 10.0 MW and over, without SCR, shall not exceed 15 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv.
 - 301.3 Gas Turbines rated at 10.0 MW and over, with SCR, shall not exceed 9 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 25 ppmv.
(Amended September 21, 1994)
- 9-9-302 Emission Limits, Low Usage:** Effective January 1, 1997, a person shall not operate a stationary gas turbine rated at 4.0 MW or greater and operating less than 877 hours per year unless nitrogen oxides (NO_x) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 42 ppmv when firing with natural gas and 65 ppmv when firing with non-gaseous fuel, and provided the requirements of Section 9-9-502 are satisfied.
(Amended September 21, 1994)
- 9-9-303 Emission Limits, Alternative Schedule:** A person operating a stationary gas turbine rated at 10 MW to less than 30MW, without SCR, which is otherwise subject to Section 9-9-301.2, may comply with both of the following emission limitations instead of complying with Section 9-9-301.2:

303.1 Effective January 1, 1996, a person shall not operate such a stationary gas turbine unless nitrogen oxides (NOx) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 25 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv.

303.2 Effective January 1, 2000, a person shall not operate such a stationary gas turbine unless nitrogen oxides (NOx) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 15 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv. (Adopted September 21, 1994)

9-9-304 Emission Limits, Interim RACT: Effective May 31, 1995, a person shall not operate a stationary gas turbine rated at 30 MW or greater and operating 877 hours per year or more unless nitrogen oxides (NOx) emission concentrations, corrected to 15 percent O₂ (dry basis), do not exceed 42 ppmv when firing with natural gas or 65 ppmv when firing with non-gaseous fuels. (Adopted September 21, 1994)

9-9-305 Emission Limits, Existing Low-NOx Turbines: Effective January 1, 1997, a person shall not operate a stationary gas turbine which 1) received a permit to operate prior to May 5, 1993, 2) was required to comply with Best Available Control Technology provisions limiting NOx emissions to 25 ppm or below, and 3) used a technology other than SCR to comply with that limit unless nitrogen oxides (NOx) emissions, corrected to 15 percent O₂ (dry basis), do not exceed 18 ppmv, except that, for non-gaseous fuel firing during natural gas curtailment or short testing periods, the limit shall be 42 ppmv. (Adopted September 21, 1994)

9-9-400 ADMINISTRATIVE REQUIREMENTS

9-9-401 Certification, Efficiency: If a person who operates a gas turbine subject to the limits of subsections 9-9-301.2, 301.3, 9-9-303, or 9-9-305 can demonstrate a thermal efficiency (EFF) greater than 25 percent in accordance with subsections 401.2.1 or 401.2.2, the emissions limit may be adjusted in accordance with Section 9-9-401.1.

$$401.1 \text{ Adjusted Emission Limit} = \frac{\text{Emission Limit} \times \text{EFF}}{25}$$

401.2 EFF (percent efficiency) is the higher of 2.1 or 2.2. An EFF that is less than 25% shall be assigned a value of 25%.

$$2.1 \quad \text{EFF} = \frac{3412 \times 100\%}{\text{Actual Heat Rate at HHV of Fuel (BTU/KW-HR)}}$$

which is the demonstrated percent efficiency of the gas turbine only as calculated without consideration of any downstream energy recovery (not used for power augmentation) from the actual heat rate, (BTU/KW-HR) or 1.34 (BTU/HP-HR); corrected to the HHV (higher heating value) of the fuel and standard conditions, as measured at peak load for that facility.

$$\text{or} \\ 2.2 \quad \text{EFF} = \text{Manufacturer's Rated Efficiency}^* \times \frac{\text{LHV}}{\text{HHV}}$$

*With Air Pollution Equipment at LHV

which is the manufacturer's continuous rated percent efficiency of the gas turbine with air pollution equipment after correction from LHV to HHV of the fuel.

(Amended September 21, 1994)

9-9-402 Compliance Schedule: A person who must modify existing sources or install new control equipment to meet the requirements of Section 9-9-301 or 302 shall comply with the following increments of progress:

402.1 By January 1, 1995: Submit an application for any Authority to Construct to achieve compliance with such requirements.

402.2 By January 1, 1996: Submit a status report to the APCO stating the progress of the modification or installation.

402.3 By January 1, 1997: Be in compliance with all requirements of this Rule.

9-9-403 Alternative Compliance Schedule: A person who must modify existing sources or install new control equipment to meet the requirements of Section 9-9-303 shall comply with the following increments of progress:

403.1 By January 1, 1995: Submit an application for any Authority to Construct to achieve compliance with Section 9-9-303.1.

403.2 By July 1, 1995: Submit a status report to the APCO stating the progress of the modification or installation to achieve compliance with Section 9-9-303.1.

403.3 By January 1, 1996: Be in compliance with the requirements of Section 9-9-303.1 and all other applicable requirements of this Rule.

403.4 By January 1, 1998: Submit an application for any Authority to Construct to achieve compliance with Section 9-9-303.2.

403.5 By January 1, 1999: Submit a status report to the APCO stating the progress of the modification or installation to achieve compliance with Section 9-9-303.2.

403.6 By January 1, 2000: Be in compliance with the requirements of Section 9-9-303.2 and all other applicable requirements of this Rule

(Adopted September 21, 1994)

9-9-500 MONITORING AND RECORDS

9-9-501 Monitoring and Recordkeeping Requirements: A person who operates any stationary gas turbine rated equal to or greater than 10.0 MW and operated an average of more than 4000 hours per year over the last three years before April 21, 1993, shall install, operate and maintain in calibration a continuous emissions monitor (CEM), or alternative monitoring system, capable of determining exhaust gas NO_x concentrations. A CEM must meet the requirements of the District Manual of Procedures, Volume V. Any alternative monitoring system must be approved by the APCO. Such approval will only be granted upon a determination, pursuant to the criteria of 40 CFR Part 75, Subpart E, that the alternative monitoring system provides information with the same precision, reliability, accessibility, and timeliness as that provided by a CEM for the source. (Amended September 21, 1994)

9-9-502 Records, Low Usage: A person subject to the requirements of Section 9-9-302 or seeking exemption per Section 9-9-112 of this Rule shall maintain a daily gas turbine operating record that includes, the actual start-up and stop time, total hours of operation, type and quantity of fuel used (liquid/gas). This information shall be available to District staff upon request for at least two years from the date of entry.

9-9-503 Initial Demonstration of Compliance: A person who must modify existing sources or install new control equipment shall conduct a District approved source test by the following dates and submit the results to the District within two months after the following dates:

- 503.1 March 31, 1996, for the purpose of demonstrating compliance with Section 9-9-303.1.
- 503.2 March 31, 1997, for the purpose of demonstrating compliance with Section 9-9-301, 302, or 305.
- 503.3 March 31, 2000, for the purpose of demonstrating compliance with Section 9-9-303.2
(Amended September 21, 1994)

9-9-600 MANUAL OF PROCEDURES

- 9-9-601 Determination of Emissions:** Emissions of oxides of nitrogen, as specified in Sections 9-9-301, 302, 303, 304, and 305 shall be measured as prescribed in the District Manual of Procedures, Volume IV, ST-13A or B.
(Amended September 21, 1994)
- 9-9-602 Determination of Stack Gas Oxygen:** Oxygen content of the exhaust gas shall be determined by using District Manual of Procedures, Volume IV, ST-14.
- 9-9-603 Continuous Emission Monitoring:** Continuous Emissions Monitoring (CEM) procedures shall be determined using District Manual of Procedures, Volume V.
- 9-9-604 Determination of HHV and LHV:** The HHV and LHV shall be determined using 1) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuel; or 2) ASTM 1826-88 or ASTM 1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.



REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 10
NITROGEN OXIDES AND CARBON MONOXIDE FROM BOILERS, STEAM
GENERATORS AND PROCESS HEATERS IN PETROLEUM REFINERIES

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**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 10**

**NITROGEN OXIDES AND CARBON MONOXIDE FROM BOILERS, STEAM
GENERATORS, AND PROCESS HEATERS IN PETROLEUM REFINERIES**

(Adopted January 5, 1994)

9-10-100 GENERAL

9-10-101 Description: This Rule limits the emissions of nitrogen oxides and carbon monoxide from boilers, steam generators, and process heaters in petroleum refineries.

9-10-110 Exemptions: The requirements of this Rule shall not apply to the following:

- 110.1 Boilers, steam generators, and process heaters with a rated heat input less than 10 million BTU/hour, if fired exclusively with natural gas, liquefied petroleum gas, or any combination thereof;
- 110.2 Boilers, steam generators, and process heaters with a rated heat input less than 1 million BTU/hour fired with any fuel;
- 110.3 Waste heat recovery boilers that are used to recover sensible heat from the exhaust of combustion turbines or reciprocating internal combustion engines;
- 110.4 Boilers, steam generators, and process heaters processing hydrogen sulfide process flue gas in sulfur recovery plants and their tail-gas treating units, or sulfuric acid manufacturing plants.
- 110.5 Boilers, steam generators, and process heaters fired on non-gaseous fuel when natural gas is unavailable for use.

9-10-111 Limited Exemption, Small Units: The requirements of Sections 9-10-301, 303, and 305 shall not apply to the use of any small units, provided the requirements of Section 9-10-306 are satisfied.

(Amended July 17, 2002)

9-10-112 Limited Exemption, Low Fuel Usage: The requirements of Sections 9-10-301, 303, and 306 shall not apply to the use of any boiler, steam generator, or process heater that has an annual heat input less than 90,000 therms during each consecutive 12-month period or that accepts a condition in their operating permit limiting the annual heat input to less than 90,000 therms, provided the requirements of Section 9-10-306 and subsection 9-10-502.2 are satisfied.

(Amended July 17, 2002)

9-10-200 DEFINITIONS

9-10-201 Affected Unit: Any refinery boiler, steam generator, and process heater not exempted under Sections 9-10-110, 111, and 112.

9-10-202 Boiler or Steam Generator: Any combustion equipment used to produce steam or heat water.

9-10-203 British Thermal Unit (BTU): The amount of heat required to raise the temperature of one pound of water from 59° F to 60° F at one atmosphere.

9-10-204 CO Boiler: Any boiler or furnace which processes the off-gases from a catalytic cracking unit regenerator or a coker burner.

9-10-205 Combustion Modification: Any modification of the burner, combustion air flow (including flue-gas recirculation), or fuel-flow system which reduces nitrogen oxide emissions.

9-10-206 Heat-Input: The heat of combustion released due to burning a fuel in a source, using higher heating value of the fuel. This does not include the sensible heat of incoming combustion air. In the case of carbon monoxide boilers, the heat input includes the sensible heat of regenerator off-gases and the heat of combustion of the incoming carbon monoxide and of the auxiliary fuel.

- 9-10-207 Higher Heating Value (HHV):** The total heat liberated per mass of fuel burned (BTU per pound) when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions per Section 9-10-604.
- 9-10-208 Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64.
- 9-10-209 Nitrogen Oxides (NO_x):** The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- 9-10-210 Non-Gaseous Fuel:** Any fuel which is not a gas at 68° F and one atmosphere.
- 9-10-211 Operating Day:** 24 hours from midnight to midnight.
- 9-10-212 Out of Service:** The period of time during which a unit is in an inactive state following shutdown.
- 9-10-213 Petroleum Refinery:** Any facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking, or reforming of unfinished petroleum derivatives.
- 9-10-214 Process Heater:** Any combustion equipment that transfers heat from combustion gases to water or process streams.
- 9-10-215 Rated Heat Input:** The heat input capacity specified on the nameplate of the combustion source. If the combustion source has been physically modified and/or operated in such a manner that its maximum heat input is different from the heat input capacity specified on the nameplate, then the modified maximum heat input per Section 9-10-503 shall be considered as the rated heat input.
- 9-10-216 Refinery-wide Emission Rate:** The ratio of the total mass of discharge into the atmosphere of nitrogen oxides, in pounds, from affected units, excluding CO boilers, to the sum of the actual heat input to those units in million BTU, calculated over a twenty-four (24) hour operating day.
- 9-10-217 Small Unit:** Any refinery boiler, steam generator, or process heater with a rated heat input less than 10 million BTU/hour but greater than or equal to 1 million BTU/hour that has the capability of firing any fuel other than natural gas or liquefied petroleum gas.
- 9-10-218 Start-up or Shutdown:** Start-up is that period of time, not to exceed twelve (12) hours unless specifically extended by a permit condition, during which a unit is brought up to its normal operating temperature from a cold start, initially at zero fuel flow, by following a prescribed series of separate steps or operations. Shutdown is that period of time, not to exceed nine (9) hours unless specifically extended by a permit condition, during which a unit is taken out of service from a normal operating mode to an inactive status following a prescribed series of separate steps or operations.
- 9-10-219 Therm:** One hundred thousand (100,000) BTUs.
- 9-10-220 Unit:** Any petroleum refinery boiler, steam generator, or process heater, as defined in Sections 9-10-202 and 214 of this Section, having an Authority to Construct or a Permit to Operate prior to January 5, 1994.
- 9-10-300 STANDARDS**
- 9-10-301 Emission Limit For Facility, NO_x:** Except as provided in Section 9-10-403, effective July 1, 1997, a person shall not exceed a refinery-wide emission rate from affected units, excluding CO boilers, of 0.033 pounds NO_x per million BTU of heat input, based on an operating-day average. Affected units that are undergoing start-up or shutdown and affected units that are out of service are included in the refinery-wide emission rate as follows:
- 301.1 Units in Start-up or Shutdown: For the purposes of determining compliance with the emission limit of Section 9-10-301, the contribution of each affected unit that is in a start-up or shutdown period shall be calculated from the unit's NO_x emission rate, as measured by the initial source test required by Section

9-10-501 or a more recent compliance source test, for that unit at the capacity during the source test.

301.2 Units Out of Service: For the purposes of determining compliance with the emission limit of Section 9-10-301, the contribution of each affected unit that is out of service for repairs, maintenance, and/or inspection shall be taken as the operating-day average of NO_x emissions at the average heat input over the previous thirty (30) day period. This calculation procedure shall be utilized no more than sixty (60) days for any one unit in a calendar year.

301.3 Units Test-Fired On Non-Gaseous Fuel: For the purposes of determining compliance with the emission limit of Section 9-10-301, the contribution of each affected unit that is fired on non-gaseous fuel for equipment testing shall be taken as the operating-day average of NO_x emissions at the average heat input over the previous thirty (30) day period. Equipment testing shall not exceed a total of forty-eight (48) hours during any calendar year for any one unit.

9-10-302 Deleted, July 17, 2002

9-10-303 Emission Limit For Facility (Federal Requirements): Effective May 31, 1995, a person shall not exceed a refinery-wide emission rate from affected units, excluding CO boilers, of 0.20 pounds NO_x per million BTU of heat input, based on an operating-day average.

303.1 Effective May 31, 1995, except during start-up and shutdown, a person shall not shall not operate a CO boiler unless the emissions of nitrogen oxides (NO_x) do not exceed 300 ppm, dry at 3% oxygen, based on an operating-day average.

(Amended July 17, 2002)

9-10-304 Emission Limit For CO Boilers, NO_x: Except as provided in Section 9-10-403, effective July 1, 1997, except during start-up and shutdown, a person shall not operate a CO boiler unless at least one of the following is met:

304.1 Emissions of nitrogen oxides (NO_x) do not exceed 150 ppm, dry at 3% oxygen, based on an operating-day average; or

304.2 Emissions of nitrogen oxides (NO_x) are controlled by an emission control system with a NO_x control efficiency of at least 50 percent by weight.

9-10-305 Emission Limit For Each Affected Unit, CO: Except as provided in Section 9-10-403, effective July 1, 1997, a person shall not operate an affected unit unless carbon monoxide emissions of 400 ppmv, dry at 3% oxygen, based on an operating-day average, are not exceeded.

9-10-306 Small Unit Requirements: Except as provided in Section 9-10-403, effective July 1, 1997, a person shall not operate a small unit unless at least one of the following is met:

306.1 Operate in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3 percent by volume on a dry basis; or

306.2 Tune at least once every twelve (12) months, or within two weeks of unit start-up if not operated in the last twelve (12) months, by a technician in accordance with the procedure specified in Section 9-10-605; or

306.3 Meet the emission limits specified in Sections 9-10-301 and 305.

9-10-400 ADMINISTRATIVE REQUIREMENTS

9-10-401 Control Plan Submittal: A person subject to Sections 9-10-301, 304, and 305 of this Rule shall comply with the following increments of progress:

401.1 No later than twenty-four (24) months prior to the respective dates of Sections 9-10-301, 304, and 305, submit to the APCO a control plan detailing the proposed measures to be taken in order to meet the requirements of Sections 9-10-301, 304, and 305. The control plan shall contain, at a minimum:

1.1 A list of all affected units, including the manufacturer, model number, and the maximum rated capacity for each unit.

- 1.2 A description of each affected unit and the NO_x control system proposed for each unit, including type and design principles, as well as a description of any ancillary equipment related to the control emissions. Data on the expected performance of the NO_x control system shall also be included;
 - 1.3 The proposed mass rate of nitrogen oxides emissions for each affected unit, excluding CO boilers, that will achieve the refinery-wide emission rate specified in Section 9-10-301;
 - 1.4 The proposed mass rate of nitrogen oxides emissions for each CO boiler that will achieve the emission rate specified in Section 9-10-304; and
 - 1.5 A proposed implementation schedule for each affected unit, including but not limited to specific dates for the following events: final engineering, contract award, construction, and final compliance.
- 401.2 No later than eighteen (18) months prior to the respective dates of Sections 301, 304, and 305, submit applications for all Authorities to Construct required for compliance with the respective sections of this Rule.

(Amended July 17, 2002)

9-10-402 Control Plan Submittal, Small Units: A person subject to Section 9-10-306 of this Rule shall comply with the following increments of progress:

- 402.1 No later than twelve (12) months prior to the compliance date of Section 306, submit to the APCO a plan to comply with the requirements of Section 9-10-306. The plan shall contain, at a minimum:
- 1.1 A list of all sources with the rated heat input capacities; and
 - 1.2 A selection of one of the options specified in Section 306.

(Amended July 17, 2002)

9-10-403 Compliance Date, Clean-Fuel Extension Allowance: Notwithstanding the effective dates specified in Sections 9-10-301, 304, 305, and 306, affected facilities that are in the process of, or have completed, making modifications to comply with the State Phase II Reformulated Gasoline Requirement (California Code of Regulations, Section 2260 et seq.) and the Federal Reformulated Gasoline Requirement (1990 Clean Air Act, 42 U.S.C.A., Section 7545) shall meet a compliance date of July 1, 2002. Effective July 1, 1997, any affected facility not producing the state and federal clean fuels shall comply with the effective dates in Sections 9-10-301, 304, 305, and 306.

- 403.1 Commencing six (6) months after January 5, 1994, and every six months thereafter until clean-fuels project completion, facilities shall submit a status report verifying progress toward compliance with state and federal clean-fuel requirements.

9-10-500 MONITORING AND RECORDS

9-10-501 Initial Demonstration of Compliance: All units identified in the control plan of Section 9-10-401 shall be tested for nitrogen oxide and carbon monoxide emissions while firing gaseous fuel and non-gaseous fuel, if applicable, at the maximum rated capacity or as near thereto as practicable. Such tests shall be performed:

- 501.1 Within one hundred and eighty (180) days after completion of modifications, but no later than thirty (30) days prior to the respective dates of Sections 301, 304, and 305 for units which are to be modified with nitrogen oxide control equipment; and
- 501.2 No later than six (6) months prior to the respective dates of Sections 301, 304, and 305 for units which do not require modification.

9-10-502 Monitoring: A person subject to Sections 9-10-301, 303, 304, and 305 shall submit to the APCO a monitoring plan to provide, properly install, maintain in good working order, and operate the following equipment:

- 502.1 An in-stack nitrogen oxide (NO_x), carbon monoxide (CO), and oxygen (O₂) continuous emission monitoring system (CEMS), or equivalent verification

system. The CEMS must meet the requirements of the District Manual of Procedures, Volume V, Continuous Emission Monitoring, Policy and Procedures.

502.2 A fuel-flow meter in each fuel line for each affected unit.

(Amended July 17, 2002)

9-10-503 Modified Maximum Heat Input: Any unit that has been physically modified such that its maximum heat input is different than the heat input specified on the nameplate shall demonstrate to the APCO the maximum heat input while operating the source at maximum capacity.

9-10-504 Records: The owner/operator of a source subject to this rule shall keep the following records, in a form suitable for inspection for a period of at least five (5) years. Such records shall be retained for a minimum of sixty (60) months from date of entry and made available to the APCO upon request. These records shall include, but are not limited to the following:

504.1 For all sources subject to the requirements of Sections 9-10-301, 304, or 305, or, effective July 17, 2002, 303:

- 1.1 The continuous emission monitoring measurements or equivalent system parameters for NO_x, CO, and O₂ in ppmv; and hourly (lb/hour) and daily (lb/day) NO_x emissions for each source;
- 1.2 The type, heat input (BTU/hr and BTU/day), and higher heating value of each fuel burned, and the injection rate for any reactant chemicals used by the emission control system(s) on a daily basis.
- 1.3 The date, time, and duration of any start-up, shutdown or malfunction in the operation of any unit, emission control equipment, or emission monitoring equipment; and
- 1.4 The results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any continuous emission monitors that have been installed pursuant to Section 9-10-502 of this Rule.
- 1.5 A list of all sources subject to the NO_x refinery-wide emission rate limits in Sections 9-10-301 and 303.
- 1.6 Total NO_x emissions and total heat input for all sources listed in subsection 504.1.5, on a daily basis; and
- 1.7 The date, time and duration of all startups and shutdowns for affected sources.

504.2 For all sources subject to subsection 9-10-306.2, records of annual tune-ups.

(Amended July 17, 2002)

9-10-505 Reporting Requirements: A person subject to the requirements of Sections 9-10-301, 303, 304, 305, and/or 306 shall meet the following reporting requirements:

505.1 Report to the APCO any violation of Section 9-10-301, 303, 304, 305, and/or 306, in writing within ninety-six (96) hours after such occurrence.

505.2 Submit a written report for each calendar quarter to the APCO. The report shall be due on the 30th day following the end of the calendar quarter and shall include:

- 2.1 A summary of the data obtained from the CEMS and the fuel meters installed pursuant to Section 9-10-502; and
- 2.2 The date, time, duration, and magnitude of emissions in excess of the appropriate standards; the nature and cause of the excess (if known); the corrective actions taken; and the preventive measure adopted.

(Amended July 17, 2002)

9-10-600 MANUAL OF PROCEDURES

9-10-601 Determination of Nitrogen Oxides: Compliance with the nitrogen oxide emission requirements of Sections 9-10-301, 303, and 304 shall be determined by continuous emission monitors that have been installed, or by equivalent verification system pursuant to Section 9-10-502, and meet the requirements of Volume V of the District Manual of Procedures. CEMS shall be verified by source test as set forth in the

District Manual of Procedures, Volume IV, ST-13A (nitrogen oxides) and ST-14 (oxygen).

(Amended July 17, 2002)

- 9-10-602 Determination of Carbon Monoxide and Stack-Gas Oxygen:** Compliance with the carbon monoxide emission requirements of Section 9-10-305 shall be determined by continuous emission monitors that have been installed, or by equivalent verification system pursuant to Section 9-10-502, and meet the requirements of Volume V of the District Manual of Procedures. CEMS shall be verified by source test as set forth in the District Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen).
- 9-10-603 Compliance Determination:** All emission determinations shall be made in the as-found operating condition, except during periods of start-up or shutdown as specified by Section 9-10-218. In addition to any continuous monitoring system (CEMS) required by Sections 9-10-502, 601, and 602, emission determinations shall include at least one source test, as specified in Section 9-10-501.
- 9-10-604 Determination of Higher Heating Value:** If certification of the higher heating value is not provided by the third-party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.
- 9-10-605 Tune-Up Procedures:** The tuning procedure required by Section 9-10-306.2 shall be performed in accordance with the procedure set forth in the District Manual of Procedures, Volume I, Chapter 5.

REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 11
NITROGEN OXIDES AND CARBON MONOXIDE FROM
ELECTRIC POWER GENERATING STEAM BOILERS

(Adopted February 16, 1994)

9-11-100 GENERAL

9-11-101 Description: This Rule limits the emissions of nitrogen oxides and carbon monoxide from electric power generating steam boilers. (Amended May 17, 2000)

9-11-110 Exemption, Limited Heat Input Capacity: The requirements of this Rule shall not apply to any boiler with a rated heat input capacity less than 250 million BTU/hour. (Amended November 15, 1995)

9-11-111 Exemption, Startup or Shutdown: The emission limits of Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, 310, and 311 shall not apply during the startup or shutdown period of any applicable boiler, with the following limitations:

111.1 Startup: For boilers with a rated heat input capacity greater than or equal to 5.0 million BTU/hour, the duration of each startup procedure shall not exceed twenty (20) hours unless catalytic reaction temperature has not been reached, if applicable. For boilers with a rated heat input capacity of less than 5.0 million BTU/hour, the duration of each startup procedure shall not exceed twelve (12) hours unless catalytic reaction temperature has not been reached, if applicable;

111.2 Shutdown: The duration of each shutdown procedure shall not exceed eight (8) hours. (Amended November 15, 1995)

9-11-112 Exemption, Oil Testing: The non-gaseous fuel firing limitations of subsections 9-11-301.4, 302.1.4, 303.4, 304.2, 305.4, and 306.4, and Section 9-11-309 shall not apply to oil-burn readiness testing or state or federal agency required performance testing not to exceed a total of twenty-four (24) hours per boiler between May 1 and October 31 in any one year and a total of ninety-six (96) hours per boiler in any calendar year, or oil-burn emission testing required by the APCO. (Amended 11/15/95; 5/17/00)

9-11-113 Exemption, Limited Capacity Factor: The provisions of Section 9-11-305 shall not apply to any boiler specified in that section that operates with a capacity factor of less than two (2) percent between May 1 and October 31 in any one year, and below four (4) percent in any calendar year, or if the boiler is required to operate in excess of these capacity factors due to an electric system emergency as defined in Section 9-11-207 and the affected boiler has never been required to meet the provisions of Section 9-11-305. For boilers that are subject to Section 9-11-305 and have refractory lined furnace hoppers, as defined in Section 9-11-217, the capacity factor limits shall apply to the aggregate average of the heat input weighted capacity factors of these boilers. Boilers qualifying for this exemption or in compliance with Section 9-11-307 shall not be included in the systemwide NO_x emission rate calculation for the purpose of determining compliance with Section 9-11-309.

(Amended November 15, 1995)

9-11-114 Exemption, Heat Recovery Steam Generators: The requirements of this Rule shall not apply to duct burners and heat recovery steam generators that are used to recover sensible heat from the exhaust of combustion turbines.

(Adopted May 17, 2000)

9-11-200 DEFINITIONS

9-11-201 Annual Heat Input: The total heat input of fuels burned by a boiler during the consecutive 12-month period of any calendar year, as determined from the higher heating value and cumulative annual usage of each fuel.

9-11-202 Boiler: Any combustion equipment used to produce steam or to heat water.

- 9-11-203 British Thermal Unit (BTU):** The amount of heat required to raise the temperature of one pound of water from 59°F to 60°F at one atmosphere.
- 9-11-204 Capacity Factor:** The ratio of the actual heat input burned by a boiler divided by the heat input that would have been burned by the boiler if it had operated at full rated heat input capacity, calculated over a specified period of time and expressed as a percentage (e.g., an annual capacity factor would be calculated over a calendar year).
- 9-11-205 Catalytic Reaction Temperature:** The minimum temperature required by a catalytic emission abatement system to achieve the design emission reduction efficiency.
- 9-11-206 Electric Power Generating System:** The combined total of all affected steam boilers used for electric power generation in the Bay Area Air Quality Management District that are owned and/or operated by a person or persons under common ownership or contractual obligation. (Amended May 17, 2000)
- 9-11-207 Electric System Emergency:** When an electric power generating system is required to request or provide emergency electrical support, as defined in Item 6 of the Coordinated Bulk Power Supply Program, Western Systems Coordinating Council (April 1, 1992). For the purposes of this Rule, this definition is limited to those situations in which the specified procedures for requesting emergency relief have been followed, including a determination that normal arrangements for capacity and energy are not sufficient to avoid area brownouts or blackouts. (Amended May 17, 2000)
- 9-11-208 Force Majeure Natural Gas Curtailment:** An interruption in natural gas service, such that the daily fuel needs of a boiler cannot be met with natural gas available, due to one of the following reasons:
- 208.1 An unforeseeable failure or malfunction, not resulting from an intentional act or omission that the governing state, federal, or local agency finds to be due to an act of gross negligence on the part of the owner or operator of the boiler; or
 - 208.2 A natural disaster; or
 - 208.3 The natural gas is curtailed pursuant to governing state, federal, or local agency rules or orders; or
 - 208.4 The serving natural gas supplier provides notice to the District that, with forecasted natural gas supplies and demands, natural gas service is expected to be curtailed pursuant to governing state, federal, or local agency rules or orders. (Amended May 17, 2000)
- 9-11-209 Heat Input:** The heat of combustion released due to burning a fuel in a boiler, using the higher heating value of the fuel. This does not include the sensible heat of incoming combustion air.
- 9-11-210 Heat Input Weighted Average:** The heat input of the gaseous fuel per unit time divided by the total heat input per unit time and the heat input per unit time of the non-gaseous fuel divided by the total heat input per unit time. The calculated fractions are used to calculate the applicable weighted average ppmv emission limit of subsections 9-11-301.3, 302.1.3, 303.3, 304.1.3, 305.3, and 306.3.
- 9-11-211 Higher Heating Value (HHV):** The total heat liberated per mass or volume of fuel burned (BTU per pound or BTU per cubic feet), when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. The HHV is determined as specified in Section 9-11-605.
- 9-11-212 Natural Gas:** Any mixture of gaseous hydrocarbons containing at least 80 percent methane by volume, as determined according to Standard Method ASTM D1945-64 or equivalent method approved by the APCO. (Amended November 15, 1995)
- 9-11-213 Nitrogen Oxide (NO_x) Emissions:** The sum of nitric oxide (NO) and nitrogen dioxide (NO₂) in the flue gas, collectively expressed as nitrogen dioxide.
- 9-11-214 Non-Gaseous Fuel:** Any fuel which is not a gas at 68°F and one atmosphere.
- 9-11-215 Operating Day:** Twenty-four (24) hours from midnight to midnight.
- 9-11-216 Rated Heat Input Capacity:** The heat input capacity specified on the nameplate of the boiler. If the boiler has been physically modified and/or operated in such a manner that its maximum heat input capacity is different from that specified on the nameplate, then the modified maximum heat input capacity per Section 9-11-502 shall be considered as the rated heat input capacity. (Amended November 15, 1995)

- 9-11-217 Refractory Lined Furnace Hopper:** The bottom of a boiler firebox (the compartment of a boiler in which the fuel burns), when this bottom is lined with a refractory material. (Amended November 15, 1995)
- 9-11-218 Startup or Shutdown:** Startup is that period of time during which a boiler is brought up to its normal operating temperature and pressure from an inactive status, initially at zero fuel flow, by following a prescribed series of separate steps or operations. Shutdown is that period of time during which a boiler is taken out of service from a normal operating mode to an inactive status of no fires by following a prescribed series of separate steps or operations.
- 9-11-219 Systemwide NO_x Emission Rate:** The ratio of the total mass of discharge into the atmosphere of nitrogen oxides in pounds from all affected steam boilers of an electric power generating system to the sum of the actual heat input to those boilers in million BTU, calculated over a specified period of time. (Amended 11/15/95; 5/17/00)
- 9-11-220 Electric Power Generating Steam Boiler:** A boiler that produces steam used to make electricity. (Adopted May 17, 2000)
- 9-11-300 STANDARDS**
- 9-11-301 NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Greater Than or Equal to 1.75 billion BTU/hour:** Effective December 31, 2001, a person shall not operate an electric power generating steam boiler with a rated heat input greater than or equal to 1.75 billion BTU per hour unless the following conditions and emission limits are met:
- 301.1 Gaseous Fuel: For gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 10 ppmv, dry at 3 percent oxygen;
 - 301.2 Non-Gaseous Fuel: For non-gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 25 ppmv, dry at 3 percent oxygen;
 - 301.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the NO_x emission limits specified in subsections 9-11-301.1 and 301.2 shall not be exceeded; and
 - 301.4 Limitation on Non-Gaseous Fuel Firing: From May 1 to October 31 in any calendar year, a person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208.
- 9-11-302 Interim Compliance NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Greater Than or Equal to 1.75 billion BTU/hour:** For any single electric power generating system as defined in Section 9-11-206, a person shall not operate an electric power generating steam boiler with a rated heat input greater than or equal to 1.75 billion BTU per hour unless the following conditions and emission limits are met:
- 302.1 Effective May 31, 1995, nitrogen oxides (NO_x) shall not exceed the following:
 - 1.1 Gaseous Fuel: For gaseous fuel firing, NO_x emissions shall not exceed 175 ppmv, dry at 3 percent oxygen;
 - 1.2 Non-Gaseous Fuel: For non-gaseous fuel firing, NO_x emissions shall not exceed 300 ppmv, dry at 3 percent oxygen;
 - 1.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the NO_x emission limits specified in subsections 9-11-302.1.1 and 302.1.2 shall not be exceeded; and
 - 1.4 Limitation on Non-Gaseous Fuel Firing: From May 1 to October 31 in any calendar year, a person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208.
 - 302.2 By December 31, 1996, at least one of the boilers in this boiler capacity category within the power system shall comply with the respective emission limits specified in subsections 9-11-301.1, 301.2; and 301.3; and

- 302.3 By December 31, 1998, at least two-thirds of the rated capacity of the boilers in this boiler capacity category within the power system shall comply with the respective emission limits specified in subsections 9-11-301.1, 301.2, and 301.3. (Amended May 17, 2000)

9-11-303 NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Less Than 1.75 billion BTU/hour and Greater Than or Equal to 1.5 billion BTU/hour: Effective December 31, 2004, a person shall not operate an electric power generating steam boiler with a rated heat input less than 1.75 billion BTU/hour and greater than or equal to 1.5 billion BTU/hour unless the following conditions and emission limits are met:

- 303.1 Gaseous Fuel: For gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 25 ppmv, dry at 3 percent oxygen;
- 303.2 Non-Gaseous Fuel: For non-gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 110 ppmv, dry at 3 percent oxygen;
- 303.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the emission limits specified in subsections 9-11-303.1 and 303.2 shall not be exceeded; and
- 303.4 Limitation on Non-Gaseous Fuel Firing: A person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208.

9-11-304 Interim Compliance NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Less Than 1.75 billion BTU/hour and Greater Than or Equal to 1.5 billion BTU/hour: For any single electric power generating system as defined in Section 9-11-206, a person shall not operate an electric power generating steam boiler with a rated heat input less than 1.75 billion BTU/hour and greater than or equal to 1.5 billion BTU/hour unless the following conditions and emission limits are met:

- 304.1 Effective May 31, 1995, nitrogen oxides (NO_x) shall not exceed the following:
- 1.1 Gaseous Fuel: For gaseous fuel firing, NO_x emissions shall not exceed 175 ppmv, dry at 3 percent oxygen;
- 1.2 Non-Gaseous Fuel: For non-gaseous fuel firing, NO_x emissions shall not exceed 700 ppmv, dry at 3 percent oxygen; and
- 1.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the NO_x emission limits specified in subsections 9-11-304.1.1 and 304.1.2 shall not be exceeded.
- 304.2 Limitation on Non-Gaseous Fuel Firing: Effective May 31, 1995, a person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208;
- 304.3 By December 31, 1999, at least one of the boilers in this boiler capacity category within the power system shall comply with the respective emission limits specified in subsections 9-11-303.1, 303.2, and 303.3; and
- 304.4 By December 31, 2003, at least one-half of the rated capacity of the boilers in this boiler capacity category within the power system shall comply with the respective emission limits specified in subsections 9-11-303.1, 303.2, and 303.3. (Amended May 17, 2000)

9-11-305 NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Less Than 1.5 billion BTU/hour: Effective December 31, 2004, a person shall not operate an electric power generating steam boiler with a rated heat input less than 1.5 billion BTU/hour unless the following conditions and emission limits are met:

- 305.1 Gaseous Fuel: For gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 30 ppmv, dry at 3 percent oxygen;
- 305.2 Non-Gaseous Fuel: For non-gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 110 ppmv, dry at 3 percent oxygen;
- 305.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the emission limits specified in subsections 9-11-305.1 and 305.2 shall not be exceeded;

- 305.4 Limitation on Non-Gaseous Fuel Firing: A person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208; and
- 305.5 Limitation on Total Fuel Use: The capacity factor limitations specified in Section 9-11-307 are waived, effective December 31, 2004, or at such time when the requirements of subsections 9-11-305.1 through 305.4 are met.
- 9-11-306 Interim Compliance NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Less Than 1.5 billion BTU/hour:** Effective May 31, 1995, a person shall not operate an electric power generating steam boiler with a rated heat input less than 1.5 billion BTU/hour unless the following conditions and emission limits are met:
- 306.1 Gaseous Fuel: For gaseous fuel firing in boilers with refractory lined furnace hoppers, nitrogen oxides (NO_x) shall not exceed 175 ppmv, dry at 3 percent oxygen. For gaseous fuel firing in all other boilers, nitrogen oxides (NO_x) shall not exceed 120 ppmv, dry at 3 percent oxygen;
- 306.2 Non-Gaseous Fuel: For non-gaseous fuel firing, nitrogen oxides (NO_x) shall not exceed 500 ppmv, dry at 3 percent oxygen;
- 306.3 Gaseous and Non-Gaseous Fuel: For simultaneous gaseous and non-gaseous fuel firing, the heat input weighted average of the emission limits specified in subsections 9-11-306.1 and 306.2 shall not be exceeded; and
- 306.4 Limitation on Non-Gaseous Fuel Firing: A person shall not fire an electric power generating steam boiler with a non-gaseous fuel unless gaseous fuel is not available because of a force majeure natural gas curtailment as defined by Section 9-11-208 and there exists an electric system emergency as defined in Section 9-11-207.
- 9-11-307 Interim Compliance NO_x Emission Limits for Boilers with a Rated Heat Input Capacity Less Than 1.5 billion BTU/hour:** Effective December 31, 2000, in addition to the limitations specified in Section 9-11-306, a person shall not operate an electric power generating steam boiler with a rated heat input less than 1.5 billion BTU/hour unless the following conditions are met:
- 307.1 Limitation on Total Fuel Use: The capacity factor of any boiler in this boiler capacity category, with the exception of boilers that have refractory lined furnace hoppers, as defined in Section 9-11-217, shall not exceed four (4) percent in any calendar year. This capacity factor shall not exceed two (2) percent between May 1 through October 31 in any one year. For any single electric power generating system as defined in Section 9-11-206, the capacity factor limits for boilers that are in this boiler capacity category and have refractory lined furnace hoppers shall apply to the aggregate average of the heat input weighted capacity factors of these boilers. Fuel burned in any of these boilers, with or without refractory lined furnace hoppers, for backup power during scheduled outages of boilers undergoing installation of any emission control device, pursuant to the requirements of Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, or 309 shall not be counted as part of these boiler capacity factor limits.
- 307.2 Limitation on Total Fuel Use Waiver: The fuel use limitations of subsection 9-11-307.1 shall be waived for any boiler at such time when the requirements of subsections 9-11-305.1 through 305.4 are met.
- (Amended 11/15/95; 5/17/00)
- 9-11-308 Systemwide NO_x Emission Rate Limit:** Effective May 31, 1995, the systemwide average nitrogen oxides (NO_x) emission rate from an electric power generating system, as defined in Sections 9-11-206 and 219, shall not exceed 0.28 lb/MMBTU of heat input, calculated each operating day as the average of all hourly data for the preceding 30 operating days, excluding periods of force majeure natural gas curtailment as defined in Section 9-11-208.
- (Amended May 17, 2000)
- 9-11-309 Advanced Technology Alternative Emission Control Plan:** As an alternative to compliance with the NO_x limits specified in Sections 9-11-301, 302.2, 302.3, 303, 304.3, 304.4, and 305, an electric power generating system may comply with the applicable systemwide NO_x emission rate limit for gaseous fuel in Section 9-11-309.1, and the requirements of Section 9-11-309.2, 309.3, and 309.4. A person shall

not fire an electric power generating steam boiler with non-gaseous fuel under Section 9-11-309.1 unless gaseous fuel is not available because of a force majeure natural gas curtailment.

309.1 Systemwide NO_x Emission Rate Limits: The following systemwide NO_x emission rate limits are expressed as pounds of NO_x per million BTU of heat input, calculated on a clock-hour basis, excluding boilers on force majeure natural gas curtailment. These limits become effective on January 1 of the year specified.

1997: 0.188

1998: 0.160

1999: 0.115

2000: 0.105

2002: 0.057

2004: 0.037

2005: 0.018

309.2 Boilers in Startup or Shutdown; Boilers Taken Out of Service; Boilers on Force Majeure Natural Gas Curtailment; and Oil Testing: When an affected boiler is in startup or shutdown; taken out of service for repairs, maintenance, and/or inspection; on force majeure natural gas curtailment; or being fired for oil-burn readiness testing; state, federal, or local agency-required performance testing; or oil-burn emission testing required by the APCO; or if NO_x or heat input information is unavailable due to equipment breakdown, scheduled maintenance or calibration; the boiler's contribution for the purpose of determining compliance with the applicable systemwide NO_x emission rate in Section 9-11-309.1 shall be taken as the average NO_x emissions at the average heat input of that unit over the previous thirty (30) operating days on natural gas, with the following limitations:

2.1 Startup: For boilers with a rated heat input capacity greater than or equal to 5.0 billion BTU/hour, the duration of each startup procedure shall not exceed twenty (20) hours unless catalytic reaction temperature has not been reached, if applicable. For boilers with a rated heat input capacity of less than 5.0 billion BTU/hour, the duration of each startup procedure shall not exceed twelve (12) hours unless catalytic reaction temperature has not been reached, if applicable.

2.2 Shutdown: The duration of each shutdown procedure shall not exceed eight (8) hours.

2.3 Boilers Taken Out of Service: The calculated contribution procedure shall be utilized no more than sixty (60) days for any one boiler in a calendar year.

2.4 Oil Testing: Oil-burn readiness testing or state, federal, or local agency-required performance testing shall not exceed a total of twenty-four (24) hours per boiler between May 1 and October 31 in any one year and a total of ninety-six (96) hours per boiler in any calendar year.

309.3 Election of Systemwide NO_x Emission Rate Limits (No backsliding provision): Once an electric power generating system has elected to comply with the systemwide NO_x emission rate limits in subsection 9-11-309.1, except as provided in Sections 9-11-111, 112, or 113, each electric power generating steam boiler included in that system shall remain part of an electric power generating system subject to the systemwide NO_x emission rate limits in subsection 9-11-309.1, and any such system shall not be eligible to choose to comply with any less stringent NO_x emission limit specified in Sections 9-11-301, 302.2, 302.3, 303, 304.3, 304.4, and 305, regardless of any change in ownership or composition of any electric power generating system.

309.4 Eligible Boilers: Only affected boilers, in an electric power generating system, that have District Permits to Operate issued prior to November 15, 1995, are eligible for inclusion in the Advanced Technology Alternative Emission Control Plan.

(Adopted 11/15/95; 5/17/00)

9-11-310 CO Emission Limits for Boilers with a Rated Heat Input Capacity Greater Than or Equal to 250 million BTU/hour: Effective May 31, 1995, a person shall not

operate an electric power generating steam boiler with a rated heat input greater than or equal to 250 million BTU per hour unless the following emission limits are met:

310.1 During steady state compliance source tests, carbon monoxide (CO) shall not exceed 400 ppmv, dry at 3 percent oxygen, based on the test methods referenced in Section 9-11-602;

310.2 During normal operation (CEMS compliance monitoring), carbon monoxide (CO) shall not exceed 1000 ppmv, dry at 3 percent oxygen, based on a clock hour average. (Amended November 15, 1995)

9-11-311 Ammonia Emission Limit for Boilers with a Rated Heat Input Capacity Greater Than or Equal to 250 million BTU/hour: No person shall allow the discharge from any electric power generating steam boiler with a rated heat input greater than or equal to 250 million BTU per hour, ammonia (NH₃) emissions in excess of 10 ppmv, dry at 3 percent oxygen, based on a rolling 60-minute average, resulting from the operation of any emission control device installed pursuant to the requirements of Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, or 309.

(Amended November 15, 1995)

9-11-400 ADMINISTRATIVE REQUIREMENTS

9-11-401 Compliance Schedule - Emissions Limits: A person who must modify existing sources or equipment to comply with any of the requirements of Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, 310, or 311 shall comply with the following increments of progress:

401.1 By December 31, 1994, submit to the APCO a plan for compliance for each affected boiler. For modifications to comply with Section 9-11-309, the plan shall be submitted no later than 6 months prior to the election of the alternative emission control plan. The plan shall include at a minimum:

1.1 A list of all boilers subject to this Rule, including the manufacturer, model number, and maximum rated heat input capacity for each boiler;

1.2 A description of the boiler design and the NO_x control system being considered for each boiler, as well as a description of any ancillary equipment related to the control of emissions. Data on the expected performance of the NO_x control system shall also be included;

1.3 A compliance schedule for each boiler, including, but not limited to, specific dates for the following events: final engineering, contract award, begin construction, boiler outage, complete construction, and final compliance.

401.2 No later than 12 months prior to each applicable compliance date for each boiler, submit to the APCO applications for all Authorities to Construct required to install or modify any equipment necessary to comply with the respective sections of this Rule.

401.3 By the applicable compliance date for each boiler, be in compliance with all the applicable requirements of this Rule. (Amended November 15, 1995)

9-11-402 Initial and Annual Demonstration of Compliance: Within 90 boiler operating days of the applicable compliance schedule specified in Sections 9-11-301, 302, 303, 304, 305, 306, 307, or 310 for each type of fuel, any person subject to this Rule shall conduct source tests, as specified in Sections 9-11-601, 602, or 603, for the purpose of demonstrating compliance with the appropriate Sections 9-11-301, 302, 303, 304, 305, 306, 307, 310, or 311. Compliance determination by source test with the respective emission limits shall be based on the methods referenced in Sections 9-11-601, 602, and 603. These source tests shall be conducted for each boiler at least once in any calendar year or within 12 months following the actual operation of each boiler during any calendar year. Source testing for compliance with the ammonia emission limit of Section 9-11-311 shall be conducted at least once quarterly, for each boiler that operated during the calendar quarter and was equipped with an ammonia-based NO_x control device. In no event shall this Section be interpreted to require non-gaseous fuel burning, solely to perform emissions testing or compliance demonstrations. Initial and annual source testing for NO_x and CO shall not be

required to demonstrate compliance with Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, or 310, provided CEMS are in place pursuant to Section 9-11-503.

(Amended 11/15/95; 5/17/00)

9-11-500 MONITORING AND RECORDS

9-11-501 Fuels Monitoring: Any person who operates an electric power generating steam boiler subject to Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, or 310 shall install a non-resettable, totalizing and continuous recording fuel meter in each fuel line of each such boiler.

(Amended 11/15/95; 5/17/00)

9-11-502 Modified Maximum Heat Input Capacity: Any person who operates an electric power generating steam boiler that has been physically modified and/or operated in such a manner that its maximum heat input capacity is different from that specified on the nameplate shall demonstrate to the APCO the maximum heat input capacity, as measured by a fuel meter, while operating the source at maximum capacity.

(Amended 11/15/95; 5/17/00)

9-11-503 Emissions Monitoring: Any person who operates an electric power generating steam boiler subject to Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, or 310 shall provide, properly install, maintain in good working order, and operate an in-stack continuous emission monitoring system (CEMS) for each such boiler, approved by the APCO to demonstrate compliance with the provisions of this Rule by measuring the pollutants nitrogen oxides (NO_x) and carbon monoxide (CO) and diluents oxygen (O_2) or carbon dioxide (CO_2), following the procedures of subsection 9-11-503.1. The operator of a boiler with a rated heat input capacity less than 1.5 billion BTU/hour may petition the APCO to certify the alternative monitoring methods for nitrogen oxides (NO_x) and carbon monoxide (CO) referenced in subsection 9-11-503.2.

503.1 The CEMS must meet the requirements of the District Manual of Procedures, Volume V, Continuous Emission Monitoring, Policy and Procedures, and the federal requirements referenced in Sections 9-11-601 and 602. Each CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive six (6) minute period for boilers with a rated heat input capacity greater than or equal to 1.5 billion BTU/hour, and for each successive fifteen (15) minute period for boilers with a rated heat input capacity less than 1.5 billion BTU/hour.

503.2 For any boiler that has (1) a heat input capacity less than 1.5 billion BTU/hr, (2) an average capacity factor of 10 percent or less during the previous three calendar years, (3) a capacity factor of 20 percent or less in each of those three calendar years, and (4) no ammonia-based NO_x control device installed, the owner and/or operator may, as an alternative to the CEMS:

2.1 Measure and record NO_x emissions by the source test correlation of emissions with boiler operating load, excess oxygen levels, fuels, and any other specified parameters, following the procedures specified in 40 CFR Pt. 75, Appendix E;

2.2 Measure and record CO emissions by following the analogous procedure (for NO_x emissions) specified in 40 CFR Pt. 75, Appendix E, except that CO emissions (instead of NO_x emissions) will be determined by using 40 CFR Pt. 60, Appendix A, Method 10.

(Amended 11/15/95; 5/17/00)

9-11-504 Records: Any person who operates an electric power generating steam boiler subject to Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, or 310 shall maintain permanent hourly continuous emission monitoring records for each such boiler, in a form suitable for inspection and approved by the APCO, for a period of at least five (5) years. Such records shall be made available to the APCO upon request. These records shall include, but are not limited to:

504.1 The type of fuel burned and its sulfur content, quantity of fuel burned (BTU/hour), gross energy production in megawatt hours (MW-hour), and the injection rate for any reactant chemicals used by the emission control system(s);

- 504.2 The continuous emission monitoring measurements for NO_x and CO, each expressed in ppmv and lb/hour, and also in lb/MMBTU for NO_x, and for O₂ or CO₂, expressed in volume percent;
- 504.3 The date, time, and duration of any startup, shutdown or malfunction in the operation of any boiler, emission control equipment, or emission monitoring equipment;
- 504.4 The results of performance testing, evaluations, calibrations, checks, adjustments, and maintenance of any continuous emission monitors that have been installed pursuant to Section 9-11-503 of this Rule;
- 504.5 The results of any source testing required by Section 9-11-402; and
- 504.6 The capacity factors of any boiler affected by Sections 9-11-113, 307, and 503.
- 504.7 The systemwide NO_x emission rate as specified in Sections 9-11-308 and 309, as applicable. (Amended 11/15/95; 5/17/00)

9-11-505 Reporting Requirements: Any person who operates an electric power generating steam boiler subject to Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, 310, or 311 shall meet the following reporting requirements:

- 505.1 Report to the APCO any violation of any emission standard with which the boiler is required to comply, in writing within 96 hours after such occurrence;
- 505.2 Submit a written report for each calendar month to the APCO. The report shall be submitted within 30 days of the close of the month reported on and shall include:
 - 2.1 A summary of the data obtained from the continuous emission monitoring systems that have been installed pursuant to Section 9-11-503. The format of the summary shall be approved in writing by the APCO; and
 - 2.2 The date, time, duration, and magnitude of emissions in excess of the appropriate standards required by Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, 310, or 311; the nature and cause of the excess (if known); the corrective actions taken; and the preventive measures adopted. (Amended 11/15/95; 5/17/00)

9-11-600 MANUAL OF PROCEDURES

9-11-601 Determination of Nitrogen Oxides: The methods by which samples of exhaust gases are collected and analyzed to determine concentrations of nitrogen oxides are set forth in the District Manual of Procedures, Volume IV, ST-13A. Compliance with the nitrogen oxides emission limits of Sections 9-11-301, 302, 303, 304, 305, 306, and 307, shall be determined by the source tests specified in Section 9-11-402 using ST-13A (nitrogen oxides) and ST-14 (oxygen) or ST-5 (carbon dioxide), and by the continuous emission monitors that have been installed pursuant to Section 503 and meet the requirements of Volume V of the District Manual of Procedures and the federal requirements specified in 40 CFR Pt. 75 and Appendices. Compliance with the nitrogen oxides emission limits of Sections 9-11-308 and 309 shall also be determined by these continuous emission monitors. (Amended November 15, 1995)

9-11-602 Determination of Carbon Monoxide and Stack Gas Oxygen or Carbon Dioxide: Compliance with the carbon monoxide emission limits of Section 9-11-310 shall be determined by the source tests specified in Section 402 using the methods set forth in the District Manual of Procedures, Volume IV, ST-6 (carbon monoxide) and ST-14 (oxygen) or ST-5 (carbon dioxide), and by the continuous emission monitors that have been installed pursuant to Section 503 and meet the requirements of Volume V of the District Manual of Procedures and the federal requirements specified in 40 CFR Pt. 60, App. B, Spec. 4 (CO), and 40 CFR Pt. 75 and Appendices (O₂ and CO₂). (Amended November 15, 1995)

9-11-603 Determination of Ammonia: Compliance with the ammonia emission limit of Section 9-11-311 shall be determined by the source tests specified in Section 9-11-402 using the methods set forth in the District Manual of Procedures, Volume IV, ST-1B, and EPA Method 350.3, or an alternate method approved by the APCO. (Amended November 15, 1995)

- 9-11-604 Compliance Determination:** All emission determinations shall be made in the as-found operating condition, except that no compliance determination be established during periods of startup or shutdown, as specified by Section 9-11-111. In addition to the continuous emission monitoring system (CEMS) required by Sections 9-11-503, 601, and 602, emission determinations shall include at least one source test for each boiler, conducted at its rated or attainable heat input capacity, in any calendar year or within twelve (12) months following the actual operation of each boiler during any calendar year, as specified in Section 9-11-402. Source testing for compliance with the ammonia emission limit of Section 9-11-311 shall be conducted at least once quarterly for each boiler that operated during the calendar quarter. Compliance determination by source test with the respective emission limits of Sections 9-11-301, 302, 303, 304, 305, 306, 307, 310, and 311 shall be in accordance with the methods specified in Sections 9-11-601, 602, and 603. Initial and annual source testing for NO_x and CO shall not be required to demonstrate compliance with Sections 9-11-301, 302, 303, 304, 305, 306, 307, 308, 309, or 310, provided CEMS are in place pursuant to Section 9-11-503. Compliance determination by CEMS shall be based on a clock hour average. (Amended November 15, 1995)
- 9-11-605 Determination of Higher Heating Value:** If certification of the Higher Heating Value is not provided by the third party fuel supplier, it shall be determined by one of the following test methods: (1) ASTM D2015-85 for solid fuels; (2) ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or (3) ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.

**REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 12
NITROGEN OXIDES FROM GLASS MELTING FURNACES**

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REGULATION 9
INORGANIC GASEOUS POLLUTANTS
RULE 12
NITROGEN OXIDES FROM GLASS MELTING FURNACES
(Adopted January 19, 1994)

9-12-100 GENERAL

- 9-12-101 Description:** This Rule limits the emission of nitrogen oxides (NO_x) from glass melting furnaces.
- 9-12-110 Exemptions:** The requirements of this Rule shall not apply to the following:
- 110.1** Furnaces in which all the heat required for melting is provided by electric current from electrodes submerged in the molten glass, except that heat may be supplied by fossil fuels for start-up when the furnace contains no molten glass.
 - 110.2** Furnaces with a production capacity of 4550 kilograms (5 short tons) of glass per day or less.

9-12-200 DEFINITIONS

- 9-12-201 Glass Melting Furnace:** Any unit in which heat is used to produce molten glass.
- 9-12-202 Idling:** Operation at less than 25 percent of the production capacity stated on the Permit to Operate.
- 9-12-203 Nitrogen Oxide Emissions (NO_x):** The sum of nitric oxide (NO) and nitrogen dioxide (NO_2) in the flue gas, collectively expressed as nitrogen dioxide.
- 9-12-204 Pull:** To remove glass from the furnace.
- 9-12-205 Shutdown:** The period of time during which a furnace is allowed to cool from operating temperature to a cooler temperature.
- 9-12-206 Start-up:** The period of time during which a furnace is heated to operating temperature from a lower temperature.

9-12-300 STANDARDS

- 9-12-301 Emission Limit:** A person subject to this Rule shall reduce nitrogen oxides emissions (NO_x) from any glass melting furnace pursuant to the following increments of progress until emissions do not exceed the emission limit of 2.75 grams of NO_x per kilogram (5.5 lbs of NO_x per short ton) of glass pulled, averaged over any consecutive 3-hour period excluding start-up, shutdown, and idling periods.
- 301.1** Effective January 1, 1997, a person shall not emit NO_x from any glass melting furnace at a rate in excess of 90 percent of the baseline emission rate established pursuant to Section 9-12-403.
 - 301.2** Effective January 1, 1999, a person shall not emit NO_x from any glass melting furnace at a rate in excess of 75 percent of the baseline emission rate established pursuant to Section 9-12-403.
 - 301.3** Effective January 1, 2001, a person shall not emit NO_x from any glass melting furnace at a rate in excess of 55 percent of the baseline emission rate established pursuant to Section 9-12-403, and this percentage shall be reduced by 10 percent effective each January 1 thereafter until NO_x emissions do not exceed the emission limit set forth in Section 9-12-301.

9-12-400 ADMINISTRATIVE REQUIREMENTS

- 9-12-401 Compliance Schedule:** A person subject to this Rule shall follow the compliance schedule below:
- 401.1 By February 1, 1995, submit a list of the quantity of glass produced, average cullet content, and average electric boost rate for each furnace on each day for calendar year 1994.
 - 401.2 By March 1, 1995, submit for District approval proposed furnace operating parameters for source tests, as required by Section 9-12-402.
 - 401.3 By August 1, 1995, conduct District-approved source tests for determining the baseline emission rate pursuant to Section 9-12-403.
 - 401.4 By September 1, 1995, submit the results of each source test conducted pursuant to Section 9-12-401.3 accompanied by the supporting data required by Section 9-12-402.3.
 - 401.5 By 12 months prior to the effective date of an increment of progress pursuant to Section 9-12-301, submit a complete application for any Authority to Construct necessary to achieve compliance with that increment of progress.
- 9-12-402 Furnace Operating Parameters for Source Tests:** Source tests pursuant to Sections 9-12-403 and 9-12-404 shall be conducted while furnaces are operating within District-approved parameters established as follows:
- 402.1 A person subject to this Rule shall submit proposed ranges of operating parameters for APCO approval. These ranges shall be representative of operation at or near maximum sustained production capacity as determined from data submitted pursuant to Section 9-12-401.1. Proposed ranges shall include, at a minimum, ranges for excess oxygen as measured at the top of the regenerators, bridgewall temperature, firing rate, electric boost rate, cullet content, and pull rate.
 - 402.2 The APCO shall review the proposed ranges of parameters. Ranges representative of operation at or near maximum sustained production capacity will be approved by the APCO in writing.
 - 402.3 For each source test conducted pursuant to Sections 9-12-403 and 9-12-404, sufficient data to confirm that the furnace was operated within the approved parameters shall be submitted with the source test results. At a minimum this data shall include average excess oxygen as measured at the top of the regenerators, average bridgewall temperature, average firing rate, average electric boost rate, average cullet content, and average pull rate.
- 9-12-403 Baseline Emission Rate Determinations:** A person subject to this Rule shall establish the baseline emission rate for each glass melting furnace as follows:
- 403.1 One or more District-approved source tests shall be conducted for each furnace in accordance with the requirements of Sections 9-12-601 through 9-12-604.
 - 403.2 Each source test shall be conducted while the furnace is operating within parameters approved by the APCO pursuant to Section 9-12-402.
 - 403.3 Where one source test is conducted for a furnace, the baseline emission rate for that furnace shall be the emission rate per ton of glass pulled as determined by the source test.
 - 403.4 Where more than one source test is conducted for a furnace, the baseline emission rate for that furnace shall be the sum of the mass emissions per hour as determined by each source test divided by the sum of the glass production per hour as determined for each source test.

- 9-12-404 Compliance Determinations:** A person subject to this Rule shall demonstrate compliance with Section 9-12-301 for each glass melting furnace as follows:
- 404.1 By April 1, 1997, and by each April 1 thereafter, one or more District-approved source tests shall be conducted for each furnace in accordance with the provisions of Sections 9-12-601 through 9-12-604.
 - 404.2 Each source test shall be conducted while the furnace is operating within parameters approved by the APCO pursuant to Section 9-12-402.
 - 404.3 Where one source test is conducted for a furnace, the emission rate for that furnace shall be the emission rate per ton of glass as determined by the source test.
 - 404.4 Where more than one source test is conducted for a furnace, the emission rate for that furnace shall be the sum of the mass emissions per hour as determined by each source test divided by the sum of the glass production per hour as determined for each source test.
 - 404.5 Source test results shall be submitted to the APCO (Attn: Source Test Section) by May 1 of each year.

9-12-500 MONITORING AND RECORDS

- 9-12-501 Production Monitoring:** Any person who operates a glass melting furnace subject to this Rule shall maintain a means of determining the quantity of glass pulled during a source test administered pursuant to Sections 9-12-601 through 9-12-604.
- 9-12-502 Fuel Monitoring:** Any person who operates a glass melting furnace subject to this Rule shall maintain a non-resettable totalizing fuel meter which monitors fuel usage for each glass melting furnace.

9-12-600 MANUAL OF PROCEDURES

- 9-12-601 Determination of Nitrogen Oxides:** Emissions of nitrogen oxides shall be determined using the source test procedure set forth in the District Manual of Procedures, Volume IV, ST-13A or B, as modified by Section 9-12-603.
- 9-12-602 Determination of Oxygen:** Emissions of oxygen shall be determined using the source test procedure set forth in the District Manual of Procedures, Volume IV, ST-14, as modified by Section 9-12-603.
- 9-12-603 Sampling and Averaging Period:** Sampling shall be conducted for three hours of continuous furnace operation as specified in Section 9-12-301. Concentrations of nitrogen oxides and oxygen shall be averaged over three hours.
- 9-12-604 Calculation of Mass Emission Rate Per Ton of Glass Pulled:** For purposes of determining compliance with Section 9-12-301, concentration of nitrogen oxides shall be converted to a mass emission rate pursuant to EPA Method 19, 40 CFR Part 60 Appendix A, and this result shall be converted to a mass-emission rate per ton of glass pulled.



REGULATION 10

STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

The provisions of Title 40 of the Code of Federal Regulations: Part 60 (40 CFR 60) in effect August 7, 1991, applicable to the Subparts listed in this Regulation are made part of the Rules and Regulations of the Bay Area Air Quality Management District. Whenever any source is subject to more than one rule, regulation, provision or requirement relating to the control of any air contaminant, in cases of conflict or duplication, the most stringent rule, regulation, provision, or requirement shall apply.

All new sources of air pollution and all modified or reconstructed sources of air pollution shall comply with the standards, criteria, and requirements set forth herein, except that sources of air pollution subject to and in compliance with standards in 40 CFR 63 for which specific exemptions from 40 CFR 60 exist shall not be subject to the standards, criteria, and requirements set forth herein. For the purpose of this Regulation, the word "Administrator" as used in 40 CFR 60.2 shall mean the Air Pollution Control Officer of the Bay Area Air Quality Management District, except that the Air Pollution Control Officer shall not be empowered to approve alternate or equivalent test methods nor alternative standards or work practices. Other deviations from these federal standards as presented in the CFR and which were ordered by the Bay Area Air Quality Management District Board to suit the needs of the Bay Area Air Quality Management District are noted in the affected Subpart.

1. SUBPART A GENERAL PROVISIONS

	US EPA	BAAQMD
Date First Adopted	(40FR53346, Nov. 17, 1975)	(April 19, 1989)
Date Last Amended	(60FR47095, Sept. 11, 1995)	(Dec. 20, 1995)

2. SUBPART D STANDARDS OF PERFORMANCE FOR FOSSIL-FUEL-FIRED STEAM GENERATORS FOR WHICH CONSTRUCTION IS COMMENCED AFTER AUGUST 17, 1971.

	US EPA	BAAQMD
Date First Adopted	(39FR20791, Jun. 14, 1974)	(April 19, 1989)
Date Last Amended	(55FR5138, Dec. 13, 1990)	(Dec. 20, 1995)

3. SUBPART Da STANDARDS OF PERFORMANCE FOR ELECTRIC UTILITY STEAM GENERATING UNITS FOR WHICH CONSTRUCTION IS COMMENCED AFTER SEPTEMBER 18, 1978.

	US EPA	BAAQMD
Date First Adopted	(44FR33613, Jun. 11, 1979)	(April 19, 1989)
Date Last Amended	(63FR49442, Sept. 16, 1998)	(Feb. 16, 2000)

NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.

4. SUBPART Db STANDARDS OF PERFORMANCE FOR INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS

	US EPA	BAAQMD
Date First Adopted	(51FR42768, Nov. 25, 1986)	(April 19, 1989)
Date Last Amended	(63FR49442, Sept. 16, 1998)	(Feb. 16, 2000)

NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.

5. SUBPART Dc STANDARDS OF PERFORMANCE FOR SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS

	US EPA	BAAQMD
Date First Adopted	(55FR37674, Sept. 12, 1990)	(August 7, 1991)
Date Last Amended	(63FR49442, Sept. 16, 1998)	(Feb. 16, 2000)

6. SUBPART E	STANDARDS OF PERFORMANCE FOR INCINERATORS		
		US EPA	BAAQMD
	Date First Adopted	(36FR24877, Dec. 23, 1971)	(April 19, 1989)
	Date Last Amended	(54FR6665, Feb. 14, 1989)	(July 18, 1990)
7. SUBPART Ea	STANDARDS OF PERFORMANCE FOR MUNICIPAL WASTE COMBUSTORS FOR WHICH CONSTRUCTION IS COMMENCED AFTER DECEMBER 20, 1989 AND BEFORE SEPTEMBER 20, 1994		
		US EPA	BAAQMD
	Date First Adopted	(56FR5488, Feb. 11, 1991)	(August 7, 1991)
	Date Last Amended	(60FR65382 Dec. 19, 1995)	(Oct. 8, 1997)
8. SUBPART Eb	STANDARDS OF PERFORMANCE FOR MUNICIPAL WASTE COMBUSTORS FOR WHICH CONSTRUCTION IS COMMENCED AFTER SEPTEMBER 20, 1994		
		US EPA	BAAQMD
	Date First Adopted	(60FR65387, Dec. 19, 1995)	(Oct. 8, 1997)
9. SUBPART Ec	STANDARDS OF PERFORMANCE FOR HOSPITAL/MEDICAL/INFECTIOUS WASTE INCINERATORS FOR WHICH CONSTRUCTION IS COMMENCED AFTER JUNE 20, 1996		
		US EPA	BAAQMD
	Date First Adopted	(62FR48348, Sept. 15, 1997)	(Feb. 16, 2000)
10. SUBPART F	STANDARDS OF PERFORMANCE FOR PORTLAND CEMENT PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(36FR24877, Dec. 23, 1971)	(April 19, 1989)
	Date Last Amended	(54FR27166, Jun. 28, 1989)	(July 18, 1990)
11. SUBPART G	STANDARDS OF PERFORMANCE FOR NITRIC ACID PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(39FR20794, Jun. 14, 1974)	(April 19, 1989)
	Date Last Amended	(54FR6666, Feb. 14, 1989)	(July 18, 1990)
12. SUBPART H	STANDARDS OF PERFORMANCE FOR SULFURIC ACID PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(39FR20794, Jun. 14, 1974)	(April 19, 1989)
	Date Last Amended	(54FR6666, Feb. 14, 1989)	(July 18, 1990)
13. SUBPART I	STANDARDS OF PERFORMANCE FOR ASPHALTIC CONCRETE PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(39FR9314, Mar. 8, 1974)	(April 19, 1989)
	Date Last Amended	(54FR6667, Feb. 14, 1989)	(July 18, 1990)
14. SUBPART J	STANDARDS OF PERFORMANCE FOR PETROLEUM REFINERIES		
		US EPA	BAAQMD
	Date First Adopted	(39FR9315, Mar. 8, 1974)	(April 19, 1989)
	Date Last Amended	(56FR4176, Feb. 4, 1991)	(August 7, 1991)
15. SUBPART K	STANDARDS OF PERFORMANCE FOR STORAGE VESSELS FOR PETROLEUM LIQUIDS FOR WHICH CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION COMMENCED AFTER JUNE 11, 1973, AND PRIOR TO MAY 19, 1978.		
		US EPA	BAAQMD
	Date First Adopted	(39FR9317, Mar. 8, 1974)	(April 19, 1989)
	Date Last Amended	(52FR11429, Apr. 8, 1987)	

16. SUBPART Ka	STANDARDS OF PERFORMANCE FOR STORAGE VESSELS FOR PETROLEUM LIQUIDS FOR WHICH CONSTRUCTION, RECONSTRUCTION, OR MODIFICATION COMMENCED AFTER MAY 18, 1978, AND PRIOR TO JULY 23, 1984.		
	US EPA	BAAQMD	
	Date First Adopted	(45FR23379, Apr. 4, 1980)	(April 19, 1989)
	Date Last Amended	(52FR11429, Apr. 8, 1987)	
17. SUBPART Kb	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC LIQUID STORAGE VESSELS		
	US EPA	BAAQMD	
	Date First Adopted	(52FR11420, Apr. 8, 1987)	(April 19, 1989)
	Date Last Amended	(54FR32972, Aug 11, 1989)	(July 18, 1990)
NOTE: Any violation of provision 60.113.b, testing procedures, determined by air pollution control personnel, shall constitute a violation of Subpart Kb.			
18. SUBPART L	STANDARDS OF PERFORMANCE FOR SECONDARY LEAD SMELTERS		
	US EPA	BAAQMD	
	Date First Adopted	(39FR9317, Mar. 8, 1974)	(April 19, 1989)
	Date Last Amended	(54FR6667, Feb. 14, 1989)	(July 18, 1990)
19. SUBPART M	STANDARDS OF PERFORMANCE FOR SECONDARY BRASS AND BRONZE PRODUCTION PLANTS		
	US EPA	BAAQMD	
	Date First Adopted	(39FR9318, Mar. 8, 1974)	(April 19, 1989)
	Date Last Amended	(54FR6667, Feb. 14, 1989)	(July 18, 1990)
20. SUBPART N	STANDARDS OF PERFORMANCE FOR IRON AND STEEL PLANTS		
	US EPA	BAAQMD	
	Date First Adopted	(39FR9318, Mar. 8, 1974)	(April 19, 1989)
	Date Last Amended	(54FR6667, Feb. 14, 1989)	(July 18, 1990)
21. SUBPART Na	STANDARDS OF PERFORMANCE FOR IRON AND STEEL PLANTS		
	US EPA	BAAQMD	
	Date First Adopted	(51FR161, Jan. 2, 1986)	(July 18, 1990)
	Date Last Amended	(54FR6667, Feb. 14, 1989)	(July 18, 1990)
22. SUBPART O	STANDARDS OF PERFORMANCE FOR SEWAGE TREATMENT PLANTS		
	US EPA	BAAQMD	
	Date First Adopted	(39FR9319, Mar. 8, 1974)	(April 19, 1989)
	Date Last Amended	(59FR5107, Feb. 3, 1994)	(Dec. 20, 1995)
23. SUBPART P	STANDARDS OF PERFORMANCE FOR PRIMARY COPPER SMELTERS		
	US EPA	BAAQMD	
	Date First Adopted	(41FR2338, Jan. 15, 1976)	(April 19, 1989)
	Date Last Amended	(54FR6668, Feb. 14, 1989)	(July 18, 1990)
24. SUBPART Q	STANDARDS OF PERFORMANCE FOR PRIMARY ZINC SMELTERS		
	US EPA	BAAQMD	
	Date First Adopted	(41FR2340, Jan. 15, 1976)	(April 19, 1989)
	Date Last Amended	(54FR6669, Feb. 14, 1989)	(July 18, 1990)
25. SUBPART R	STANDARDS OF PERFORMANCE FOR PRIMARY LEAD SMELTERS		
	US EPA	BAAQMD	
	Date First Adopted	(41FR2340, Jan. 15, 1976)	(April 19, 1989)
	Date Last Amended	(54FR6669, Feb. 14, 1989)	(July 18, 1990)

26. SUBPART S	STANDARDS OF PERFORMANCE FOR PRIMARY ALUMINUM REDUCTION PLANTS	US EPA Date First Adopted (45FR44207, Jun. 30, 1980) Date Last Amended (54FR6669, Feb. 14, 1989)	BAAQMD (April 19, 1989) (July 18, 1990)
27. SUBPART T	STANDARDS OF PERFORMANCE FOR THE PHOSPHATE FERTILIZER INDUSTRY: WET-PROCESS PHOSPHORIC ACID PLANTS	US EPA Date First Adopted (40FR33154, Aug. 6, 1975) Date Last Amended (54FR6669, Feb. 14, 1989)	BAAQMD (April 19, 1989) (July 18, 1990)
28. SUBPART U	STANDARDS OF PERFORMANCE FOR THE PHOSPHATE FERTILIZER INDUSTRY: SUPERPHOSPHORIC ACID PLANTS	US EPA Date First Adopted (40FR33155, Aug. 6, 1975) Date Last Amended (54FR6670, Feb. 14, 1989)	BAAQMD (April 19, 1989) (July 18, 1990)
29. SUBPART V	STANDARDS OF PERFORMANCE FOR THE PHOSPHATE FERTILIZER INDUSTRY: DIAMMONIUM PHOSPHATE PLANTS	US EPA Date First Adopted (40FR33155, Aug. 6, 1975) Date Last Amended (54FR6670, Feb. 14, 1989)	BAAQMD (April 19, 1989) (July 18, 1990)
30. SUBPART W	STANDARDS OF PERFORMANCE FOR THE PHOSPHATE FERTILIZER INDUSTRY: TRIPLE SUPERPHOSPHATE PLANTS	US EPA Date First Adopted (40FR33156, Aug. 6, 1975) Date Last Amended (54FR6670, Feb. 14, 1989)	BAAQMD (April 19, 1989) (July 18, 1990)
31. SUBPART X	STANDARDS OF PERFORMANCE FOR THE PHOSPHATE FERTILIZER INDUSTRY: GRANULAR TRIPLE SUPERPHOSPHATE STORAGE FACILITIES	US EPA Date First Adopted (40FR33156, Aug. 6, 1975) Date Last Amended (62FR18277, Apr. 15, 1997)	BAAQMD (April 19, 1989) (Feb. 16, 2000)
32. SUBPART Y	STANDARDS OF PERFORMANCE FOR COAL PREPARATION PLANTS	US EPA Date First Adopted (41FR2234, Jan. 15, 1976) Date Last Amended (54FR13384, Apr. 3, 1989)	BAAQMD (April 19, 1989) (July 18, 1990)
33. SUBPART Z	STANDARDS OF PERFORMANCE FOR FERROALLOY PRODUCTION FACILITIES	US EPA Date First Adopted (41FR18501, May 4, 1976) Date Last Amended (54FR6671, Feb. 14, 1989)	BAAQMD (April 19, 1989) (July 18, 1990)
34. SUBPART AA	STANDARDS OF PERFORMANCE FOR STEEL PLANTS: ELECTRIC ARC FURNACES CONSTRUCTED AFTER OCTOBER 21, 1974, AND ON OR BEFORE AUGUST 17, 1983	US EPA Date First Adopted (40FR43842, Sept. 23, 1975) Date Last Amended (64FR10105, Mar. 2, 1999)	BAAQMD (April 19, 1989) (Feb. 16, 2000)
35. SUBPART AAa	STANDARDS OF PERFORMANCE FOR STEEL PLANTS: ELECTRIC ARC FURNACES AND ARGON-OXYGEN DECARBURIZATION VESSELS CONSTRUCTED AFTER AUGUST 17, 1983		

		US EPA	BAAQMD
	Date First Adopted	(49FR43845, Oct. 31, 1984)	(April 19, 1989)
	Date Last Amended	(64 FR10105, Mar. 2, 1999)	(Feb. 16, 2000)
36. SUBPART BB	STANDARDS OF PERFORMANCE FOR KRAFT PULP MILLS		
		US EPA	BAAQMD
	Date First Adopted	(43FR7572, Feb. 23, 1978)	(April 19, 1989)
	Date Last Amended	(54FR6673, Feb. 14, 1989)	(July 18, 1990)
37. SUBPART CC	STANDARDS OF PERFORMANCE FOR GLASS MANUFACTURING PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(45FR66751, Oct. 7, 1980)	(April 19, 1989)
	Date Last Amended	(54FR6674, Feb. 14, 1989)	(July 18, 1990)
38. SUBPART DD	STANDARDS OF PERFORMANCE FOR GRAIN ELEVATORS		
		US EPA	BAAQMD
	Date First Adopted	(43FR34347, Aug. 3, 1978)	(April 19, 1989)
	Date Last Amended	(54FR6674, Feb. 14, 1989)	(July 18, 1990)
39. SUBPART EE	STANDARDS OF PERFORMANCE FOR SURFACE COATING OF METAL FURNITURE		
		US EPA	BAAQMD
	Date First Adopted	(47FR49287, Oct. 29, 1982)	(April 19, 1989)
	Date Last Amended	(55FR51378, Dec. 13, 1990)	(Dec. 20, 1995)
NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.			
40. SUBPART GG	STANDARDS OF PERFORMANCE FOR STATIONARY GAS TURBINES		
		US EPA	BAAQMD
	Date First Adopted	(44FR52798, Sept. 10, 1979)	(April 19, 1989)
	Date Last Amended	(54FR6675, Feb. 14, 1989)	(July 18, 1990)
41. SUBPART HH	STANDARDS OF PERFORMANCE FOR LIME MANUFACTURING PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(49FR18080, Apr. 26, 1984)	(April 19, 1989)
	Date Last Amended	(54FR6675, Feb. 14, 1989)	(July 18, 1990)
42. SUBPART KK	STANDARDS OF PERFORMANCE FOR LEAD-ACID BATTERY MANUFACTURING PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(47FR16573, Apr. 16, 1982)	(April 19, 1989)
	Date Last Amended	(54FR6675, Feb. 14, 1989)	(July 18, 1990)
43. SUBPART LL	STANDARDS OF PERFORMANCE FOR METALLIC MINERAL PROCESSING PLANTS		
		US EPA	BAAQMD
	Date First Adopted	(49FR6464, Feb. 21, 1984)	(April 19, 1989)
	Date Last Amended	(54FR6676, Feb. 14, 1989)	(July 18, 1990)
44. SUBPART MM	STANDARDS OF PERFORMANCE FOR AUTOMOBILE AND LIGHT DUTY TRUCK SURFACE COATING OPERATIONS		
		US EPA	BAAQMD
	Date First Adopted	(45FR85415, Dec. 24, 1980)	(April 19, 1989)
	Date Last Amended	(59FR1383, Oct. 11, 1994)	(Dec. 20, 1995)
NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.			

45. SUBPART NN	STANDARDS OF PERFORMANCE FOR PHOSPHATE ROCK PLANTS	US EPA	BAAQMD
	Date First Adopted	(47FR16589, Apr. 16, 1982)	(April 19, 1989)
46. SUBPART PP	STANDARDS OF PERFORMANCE FOR AMMONIUM SULFATE MANUFACTURE	US EPA	BAAQMD
	Date First Adopted	(45FR74850, Nov. 12, 1980)	(April 19, 1989)
	Date Last Amended	(54FR6676, Feb. 14, 1989)	(July 18, 1990)
47. SUBPART QQ	STANDARDS OF PERFORMANCE FOR THE GRAPHIC ARTS INDUSTRY: PUBLICATION ROTOGRAVURE PRINTING	US EPA	BAAQMD
	Date First Adopted	(47FR50649, Nov. 8, 1982)	(April 19, 1989)
NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.			
48. SUBPART RR	STANDARDS OF PERFORMANCE FOR PRESSURE SENSITIVE TAPE AND LABEL SURFACE COATING OPERATIONS	US EPA	BAAQMD
	Date First Adopted	(48FR48375, Oct. 18, 1983)	(April 19, 1989)
	Date Last Amended	(55FR51378, Dec. 13, 1990)	(Dec. 20, 1995)
NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.			
49. SUBPART SS	STANDARDS OF PERFORMANCE FOR INDUSTRIAL SURFACE COATING : LARGE APPLIANCES	US EPA	BAAQMD
	Date First Adopted	(44FR47785, Oct. 27, 1982)	(April 19, 1989)
NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.			
50. SUBPART TT	STANDARDS OF PERFORMANCE FOR METAL COIL SURFACE COATING	US EPA	BAAQMD
	Date First Adopted	(47FR49612, Nov. 1, 1982)	(April 19, 1989)
	Date Last Amended	(51FR22938, June 24, 1986)	
NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.			
51. SUBPART UU	STANDARDS OF PERFORMANCE FOR ASPHALT PROCESSING AND ASPHALT ROOFING MANUFACTURE	US EPA	BAAQMD
	Date First Adopted	(47FR34143, Aug. 6, 1982)	(April 19, 1989)
52. SUBPART VV	STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC IN THE SYNTHETIC ORGANIC CHEMICALS MANUFACTURING INDUSTRY	US EPA	BAAQMD
	Date First Adopted	(48FR48335, Oct. 18, 1983)	(April 19, 1989)
	Date Last Amended	(60FR43243, Aug. 18, 1995)	(Dec. 20, 1995)
53. SUBPART WW	STANDARDS OF PERFORMANCE FOR THE BEVERAGE CAN SURFACE COATING INDUSTRY	US EPA	BAAQMD

Date First Adopted (48FR38737, Aug. 25, 1983) (April 19, 1989)

NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District.

54. SUBPART XX STANDARDS OF PERFORMANCE FOR BULK GASOLINE TERMINALS

US EPA

BAAQMD

Date First Adopted (48FR37590, Aug. 18, 1983) (April 19, 1989)

Date Last Amended (54FR6678, Feb. 14, 1989) (July 18, 1990)

NOTE: California Air Resources Board (CARB) Certification and Test Procedures for Vapor Recovery Systems of Gasoline Delivery Tanks shall be followed in lieu of the federal procedure as shown in the CFR. Documentation and recordkeeping requirements shall record results of the CARB Certification Tests.

55. SUBPART AAA STANDARDS OF PERFORMANCE FOR NEW RESIDENTIAL WOOD HEATERS

US EPA

BAAQMD

Date First Adopted (52FR5860, Feb. 26, 1988) (April 19, 1989)

Date Last Amended (53FR12009, Apr. 12, 1988)

56. SUBPART BBB STANDARDS OF PERFORMANCE FOR RUBBER TIRE MANUFACTURING PLANTS

US EPA

BAAQMD

Date First Adopted (52FR34868, Sept 15, 1987) (April 19, 1989)

Date Last Amended (54FR38634, Sept 19, 1989) (July 18, 1990)

57. SUBPART DDD STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM THE POLYMER MANUFACTURING INDUSTRY

US EPA

BAAQMD

Date First Adopted (55FR51010, Dec. 11, 1990) (August 7, 1991)

Date Last Amended (56FR12299, Mar. 22, 1991)

NOTE: The 14-day rolling ethylene glycol concentration averaging periods specified in the federal standards are deleted and replaced with a daily concentration standard for affected facilities in the Bay Area Air Quality Management District.

58. SUBPART FFF STANDARDS OF PERFORMANCE FOR FLEXIBLE VINYL AND URETHANE COATING AND PRINTING

US EPA

BAAQMD

Date First Adopted (49FR26892, Jun. 29, 1984) (April 19, 1989)

Date Last Amended (49FR32848, Aug. 17, 1984) (April 19, 1989)

NOTE: The 30-day emissions averaging periods specified in the federal standard are deleted and replaced with 24-hour maximum emissions averaging periods for affected facilities in the Bay Area Air Quality Management District. The monthly basis used to calculate the VOC content from the source performance test in the federal standards has been deleted and replaced with a 24-hour period to demonstrate compliance on a daily basis for affected facilities in the Bay Area Air Quality Management District.

59. SUBPART GGG STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC IN PETROLEUM REFINERIES

US EPA

BAAQMD

Date First Adopted (49FR22606, May 30, 1984) (April 19, 1989)

60. SUBPART HHH STANDARDS OF PERFORMANCE FOR SYNTHETIC FIBER PRODUCTION FACILITIES

US EPA

BAAQMD

Date First Adopted (49FR13651, Apr. 5, 1984) (April 19, 1989)

Date Last Amended (55FR51378, Dec. 13, 1990) (Dec. 20, 1995)

NOTE: The six month rolling average basis specified in the federal standards is deleted and replaced with 24-hour emission averaging periods for affected facilities in the Bay Area Air Quality Management District.

61. SUBPART III	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM THE SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY (SOCMI) AIR OXIDATION UNIT PROCESSES	US EPA	BAAQMD
	Date First Adopted	(55FR26912, June 29, 1990)	(August 7, 1991)
	Date Last Amended	(55FR36932, Sept. 7, 1990)	
62. SUBPART JJJ	STANDARDS OF PERFORMANCE FOR PETROLEUM DRY CLEANERS	US EPA	BAAQMD
	Date First Adopted	(49FR37331, Sept. 21, 1984)	(April 19, 1989)
	Date Last Amended	(50FR49026, Nov. 27, 1985)	
NOTE: The observation of a leak in excess of the requirements of the rule constitutes a violation of the rule. This provision added under Section 60.622.			
63. SUBPART KKK	STANDARDS OF PERFORMANCE FOR EQUIPMENT LEAKS OF VOC FROM ONSHORE NATURAL GAS PROCESSING PLANTS	US EPA	BAAQMD
	Date First Adopted	(50FR26124, Jun. 24, 1985)	(April 19, 1989)
	Date Last Amended	(51FR2702, Jan. 21, 1986)	
64. SUBPART LLL	STANDARDS OF PERFORMANCE FOR ONSHORE NATURAL GAS PROCESSING; SO ₂ EMISSIONS	US EPA	BAAQMD
	Date First Adopted	(50FR40160, Oct. 1, 1985)	(April 19, 1989)
	Date Last Amended	(54FR6679, Feb. 14, 1989)	(July 18, 1990)
65. SUBPART NNN	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY (SOCMI) DISTILLATION OPERATIONS	US EPA	BAAQMD
	Date First Adopted	(55FR26931, June 29, 1990)	(August 7, 1991)
	Date Last Amended	(60FR58237, Nov. 27, 1995)	(Oct. 8, 1997)
66. SUBPART .OOO	STANDARDS OF PERFORMANCE FOR NONMETALLIC MINERAL PROCESSING PLANTS	US EPA	BAAQMD
	Date First Adopted	(51FR31337, Aug. 1, 1985)	(April 19, 1989)
	Date Last Amended	(62FR31359, June 9, 1997)	(Oct. 8, 1997)
67. SUBPART PPP	STANDARDS OF PERFORMANCE FOR WOOL FIBERGLASS INSULATION MANUFACTURING PLANTS	US EPA	BAAQMD
	Date First Adopted	(50FR7699, Feb. 25, 1985)	(April 19, 1989)
	Date Last Amended	(54FR6680 Feb. 14, 1989)	(July 18, 1990)
68. SUBPART RRR	STANDARDS OF PERFORMANCE FOR VOLATILE ORGANIC COMPOUND EMISSIONS FROM SYNTHETIC ORGANIC CHEMICAL MANUFACTURING INDUSTRY REACTOR PROCESSES	US EPA	BAAQMD
	Date First Adopted	(58FR45963, Aug. 31, 1993)	(January 5, 1994)
	Date Last Amended	(62FR31359, June 9, 1997)	(Oct. 8, 1997)

69. SUBPART QQQ	STANDARDS OF PERFORMANCE FOR PETROLEUM REFINERIES WASTE WATER SYSTEMS		
		US EPA	BAAQMD
	Date First Adopted	(53FR47616, Nov. 23, 1988)	(April 19, 1989)
70. SUBPART SSS	STANDARDS OF PERFORMANCE FOR MAGNETIC TAPE COATING FACILITIES		
		US EPA	BAAQMD
	Date First Adopted	(53FR38892, Oct. 3, 1988)	(April 19, 1989)
71. SUBPART TTT	STANDARDS OF PERFORMANCE FOR INDUSTRIAL SURFACE COATING; PLASTIC PARTS FOR BUSINESS MACHINES		
		US EPA	BAAQMD
	Date First Adopted	(53FR2672, Jan. 29, 1988)	(April 19, 1989)
72. SUBPART UUU	STANDARDS OF PERFORMANCE FOR CALCINERS AND DRYERS IN MINERAL INDUSTRIES		
		US EPA	BAAQMD
	Date First Adopted	(57FR44496, Sept. 28, 1992)	(January 5, 1994)
73. SUBPART VVV	STANDARDS OF PERFORMANCE FOR POLYMERIC COATING OF SUPPORTING SUBSTRATES		
		US EPA	BAAQMD
	Date First Adopted	(53FR37534, Sept. 11, 1989)	(July 18, 1990)
74. SUBPART WWW	STANDARDS OF PERFORMANCE FOR MUNICIPAL SOLID WASTE LANDFILLS CONSTRUCTED AFTER MAY 31, 1991		
		US EPA	BAAQMD
	Date First Adopted	(61FR9905, Mar. 12, 1996)	(Oct. 8, 1997)
	Date Last Amended	(64FR9258, Feb. 24, 1999)	(Feb. 16, 2000)

REGULATION 11
HAZARDOUS POLLUTANTS

RULE 1

LEAD

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REGULATION 11
HAZARDOUS POLLUTANTS

RULE 1

LEAD

11-1-100 GENERAL

11-1-101 Description: The purpose of this Rule is to control the emission of lead to the atmosphere.

11-1-102 Optional Standards: A person responsible for the emission of lead may elect, by written notification to the APCO, to be regulated by the requirements of Section 11-1-303 rather than Section 11-1-302.

11-1-300 STANDARDS

11-1-301 Daily Limitation: A person shall not discharge any emission of lead, or compound of lead calculated as lead, from any emission point in excess of 6.75 kg (15 lbs) per day.

11-1-302 Ground Level Concentration Limit Without Background: A person shall not discharge any emission of lead, or compound of lead calculated as lead, that will result in ground level concentrations in excess of 1.0 ug/m³ averaged over 24 hours.

11-1-303 Ground Level Concentration Limit With Background: A person electing to be regulated by this Section shall not discharge any emission of lead, or compound of lead, which results in ground level concentrations of lead in excess of 1.0 ug/m³ above the background concentrations of lead averaged over 30 days. This Section shall not apply to the ground level concentrations occurring on the property from which such emission occurs, provided such property from the emission point to the point of such concentration is controlled by the person responsible for the emissions.

11-1-500 MONITORING AND RECORDS

11-1-501 Monitoring: A person electing to be regulated by Section 11-1-303 shall provide, install and maintain monitoring equipment.

11-1-600 MANUAL OF PROCEDURES

11-1-601 Determination of Ground Level Emission Limits: Emissions limited by Section 11-1-302 shall be determined by use of dispersion calculations described in the Manual of Procedures, Volume VI, Section 2. (Amended March 17, 1982)

11-1-602 Determination of Background Concentrations: Background concentrations of lead shall be determined in accordance with procedures described in the Manual of Procedures, Volume VI, Section 2. (Amended March 17, 1982)

11-1-603 Atmospheric Sampling: The requirements of Section 11-1-501 for monitoring concentrations of lead, including siting, sampling, and reporting procedures, are described in the Manual of Procedures, Volume VI, Section 2.

(Amended March 17, 1982)

11-1-604 Determination of Daily Emission Limits: Emissions limited by Section 11-1-301 shall be determined by use of methods prescribed in the Manual of Procedures, Volume IV, ST-9. (Adopted March 17, 1982)

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 2
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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 2

ASBESTOS DEMOLITION, RENOVATION AND MANUFACTURING

11-2-100 GENERAL

11-2-101 Description: The purpose of this Rule is to control emissions of asbestos to the atmosphere and provide appropriate waste disposal procedures.

(Amended September 5, 1990)

11-2-110 Exemption, Visible Emission Standard: Those operations that primarily install asbestos friction products in motor vehicles are exempt from the visible emission requirements of Section 11-2-302.

11-2-111 Exemption, Prohibited Operations: Cold process cutback asphalt roof coatings and exterior and interior coatings and laminating resins containing encapsulated asbestos fibers bound within the finished product from manufacture through application are exempt from the limitations of Section 11-2-301.3.

11-2-112 Exemption, Maintenance and Decontamination: Maintenance and decontamination operations where no RACM is being removed are exempt from the provisions of Section 11-2-303. (Adopted 9/5/90; Amended 12/4/91)

11-2-200 DEFINITIONS

11-2-201 Asbestos: Actinolite, amosite (cummingtonite, grunerite), anthophyllite, chrysotile, crocidolite (riebeckite), tremolite. (Amended September 5, 1990)

11-2-202 Asbestos Mill: Any plant engaged in the conversion or any intermediate step in the conversion of asbestos ore into commercial asbestos. Indoor and outdoor storage, handling, conveying and loading of asbestos materials is considered a part of such a plant. (Amended September 5, 1990)

11-2-203 Asbestos-Containing Waste Material: Any waste that contains or has been contaminated by commercial asbestos and is generated by a plant or operation subject to the provisions of this Rule, including, but not limited to, asbestos mill tailings, control device asbestos waste, RACM demolition and renovation waste material, disposable equipment and clothing, and bags or containers that previously contained commercial asbestos. (Amended 9/5/90; 12/4/91)

11-2-204 Commercial Asbestos: Any variety of asbestos which is produced by extracting asbestos from asbestos ore.

11-2-205 Control Device Asbestos Waste: Any asbestos-containing waste material that is collected in an air pollution control device. (Amended September 5, 1990)

11-2-206 Demolition: Wrecking, intentional burning or dismantling of any structural element or all of a building including, but not limited to, any related cutting, disjoining, stripping, removal and handling operations of RACM. (Amended 9/5/90; 12/4/91)

11-2-207 Element: Any boiler, pipe, furnace, duct, tank, reactor, turbine, or structural member.

11-2-208 Fabricating: Any processing of a manufactured product containing commercial asbestos with the exception of processing at temporary sites for the construction or restoration of buildings, structures, plants or installations.

11-2-209 Friable Asbestos-Containing Material: Any material that contains more than one percent asbestos as determined by the methods specified in Section 11-2-603 and that falls into one or more of the following categories:

- 209.1 Materials that can be crumbled, pulverized, or reduced to powder, when dry, by hand pressure. These include, but are not limited to, sprayed-on or troweled-on fireproofing, acoustic ceiling material and ceiling tiles, linoleum and linoleum backing, thermal systems insulation, non-asphalt-saturated roofing felts, asbestos-containing paper and joint compound.
- 209.2 Materials that have been rendered to a crumbled, pulverized, or powdered state, when dry, by crushing, sanding, sawing or shot-blasting or other demolition or renovation techniques. These include, but are not limited to, U.S. E.P.A. Category I non-friable asbestos-containing material as defined in 40 CFR Part 61.141 and in Section 11-2-231.
- 209.3 Materials in which the asbestos fibers are bound into a matrix, if such materials have been rendered to a powdered state, when dry, by crushing, sanding, sawing or shot-blasting or other demolition or renovation techniques, or by severe weathering. These include, but are not limited to, U.S. E.P.A. Category II nonfriable asbestos-containing material as defined in 40 CFR Part 61.141 and in Section 11-2-232.
(Amended 9/5/90; 12/4/91)
- 11-2-210 **Inactive Waste Disposal Site:** Any disposal site or portion thereof, where additional asbestos-containing waste material will not be deposited and where the surface is not disturbed by vehicular traffic.
- 11-2-211 **Manufacturing:** The combining of commercial asbestos, or in the case of woven friction products, the combining of textiles containing commercial asbestos, with any other material(s), including commercial asbestos, and the processing of this combination into a product.
- 11-2-212 **Outside Air:** The air outside buildings and structures.
- 11-2-213 **Particulate Asbestos Material:** Finely divided particles of asbestos material.
- 11-2-214 **Removing:** The taking out of RACM used on any element from any building, structure, plant or installation. (Amended 5/20/81; 9/5/90; 12/4/91)
- 11-2-215 **Renovation:** An operation other than demolition in which RACM is removed or stripped from any element of a building, structure, plant or installation.
(Amended 9/5/90; 12/4/91)
- 11-2-216 **Planned Renovation:** A renovation, or a number of such operations, in which the amount of RACM that will be removed or stripped at an installation within a maximum time of one year can be predicted. Operations that are individually non-scheduled are included, provided a number of such operations can be predicted to occur during a given period of time based on operating experience. The minimum period of time shall be 30 days. (Amended 9/5/90; 12/4/91)
- 11-2-217 **Emergency Demolition:** A demolition carried out pursuant to an order of a state or local government agency issued because the building is structurally unsound and in danger of imminent collapse, or has been declared a public nuisance.
(Amended December 4, 1991)
- 11-2-218 **Emergency Renovation:** Renovation that is not planned but results from a sudden, unexpected event. This includes operations necessitated by equipment failures and unanticipated findings of RACM or the conversion of previously nonfriable asbestos-containing material to friable material during the course of a renovation. Renovations due to fire, water, or earthquake damage, or where an imminent danger to the public health may exist, are included. Renovations in public buildings, schools or owner-occupied single family dwellings during or within ten days of the close of escrow may be included at the discretion of the APCO.
(Amended 9/5/90; 12/4/91)
- 11-2-219 **Roadways:** Surfaces on which motor vehicles operate and any shoulder which extends up to 3 m (10 feet) from the edge of the traveled way. This includes,

but is not limited to, highways, roads, streets, parking areas, driveways, and haul roads.

(Amended September 5, 1990)

- 11-2-220 **Stripping:** Taking off RACM used on any pipe, duct, boiler, tank, reactor, turbine, furnace, or structural member. (Amended 5/20/81; 9/5/90; 12/4/91)
- 11-2-221 **Active Waste Disposal Sites:** Any disposal site or portion thereof which accepts asbestos-containing waste material. (Adopted September 5, 1990)
- 11-2-222 **Asbestos-Containing Material:** Any building material which contains commercial asbestos in an amount greater than 1% by weight, area, or count as determined by the methods specified in Section 11-2-603. (Adopted 9/5/90; 12/4/91)
- 11-2-223 **Containment:** The isolation of an asbestos removal area from the outside air by use of physical barriers, usually plastic sheeting. Such barriers shall include transparent viewing ports which allow observation of all stripping and removal of RACM from outside the barrier. (Adopted 9/5/90; Amended 12/4/91)
- 11-2-224 **Cumulative Renovations:** A series of small (less than 30.8 m [100 ft.] linear, 9.4 m² [100 ft.²] or 1 m³ [35 ft.³]) renovations or removals of RACM performed during a calendar year at a single plant or facility which, taken together, would add up to a reportable amount under the provisions of this Rule. (Adopted 9/5/90; Amended 12/4/91)
- 11-2-225 **Glove Bag Technique:** A method of stripping or removing RACM in which the material is totally isolated inside a plastic bag and then manually removed using gloves which are an integral part of the bag. (Adopted 9/5/90; Amended 12/4/91)
- 11-2-226 **HEPA Filter:** A high efficiency particulate air filter capable of filtering 0.3 micron particles with 99.97 percent efficiency as determined by ASTM Method D-2988-71. (Adopted 9/5/90)
- 11-2-227 **Visible Emissions:** Any emissions or releases from any point or area source containing particulate asbestos material that are visually detectable without the aid of instruments. This includes, but is not limited to, asbestos debris found outside of containment at a job site. (Adopted 9/5/90)
- 11-2-228 **Starting Date:** The date on which actual asbestos removal begins. (Adopted September 5, 1990)
- 11-2-229 **Completion Date:** The date on which containment is removed. (Adopted 9/5/90)
- 11-2-230 **Adequately Wetted:** Sufficiently mixed or penetrated with liquid to prevent the release of particles. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted; however, the absence of visible emissions is not sufficient evidence of being adequately wetted. Material that is removed in units or parts of units shall be wet at all the exposed surfaces. If broken up, the material shall be wetted at all the exposed fracture surfaces. (Adopted December 4, 1991)
- 11-2-231 **Category I Nonfriable Asbestos-Containing Material:** Asbestos-containing packings, gaskets, resilient floor coverings, and asphalt roofing products. (Adopted December 4, 1991)
- 11-2-232 **Category II Nonfriable Asbestos-Containing Material:** Asbestos-containing material, excluding Category I nonfriable asbestos-containing material, that, when dry, and in its present form, cannot be crumbled, pulverized, or reduced to powder by hand pressure. For the purposes of this Regulation, these products include transit board, pipe and asbestos cement products, plaster, stucco, paint and mastics. (Adopted December 4, 1991)
- 11-2-233 **Conversion Operation:** A process by which asbestos material and/or asbestos-containing waste material is converted to nonasbestos (asbestos-free) material. (Adopted December 4, 1991)

- 11-2-234 **Encapsulant:** A sealant material such as latex paint which, when applied, penetrates the asbestos-containing material and binds the fibers, rendering them nonfriable. (Adopted December 4, 1991)
- 11-2-235 **Leak-Tight:** Any method of containerization that prevents solids, liquids, or particles from escaping or spilling out. (Adopted December 4, 1991)
- 11-2-236 **Owner or Operator of a Demolition or Renovation:** Any person who owns, leases, operates, controls or supervises the stationary structure being demolished or renovated, or any person who owns, leases, operates, controls or supervises demolition or renovation, or both. (Adopted December 4, 1991)
- 11-2-237 **Regulated Asbestos-Containing Material (RACM):**
- 237.1 Friable asbestos-containing material, as defined in Section 11-2-209 or,
 - 237.2 Category I nonfriable asbestos-containing material that has or will become friable, or that has been subjected to sanding, drilling, grinding, cutting, or abrading, or,
 - 237.3 Category II nonfriable asbestos-containing material that may become or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation. (Adopted December 4, 1991)
- 11-2-238 **Resilient Floor Covering:** Asbestos-containing material comprised of floor tile, including asphalt or vinyl floor tile, or sheet vinyl floor covering; but not including linoleum, sheet linoleum, or the backing of linoleum, which are considered friable for the purposes of this Rule. (Adopted 12/4/91)
- 11-2-239 **Waste Generator:** Any owner or operator of a source subject to this Rule whose act or process produces asbestos-containing waste material. (Adopted 12/4/91)
- 11-2-240 **Waste Shipment Record:** The shipping document, required by the APCO to be originated and signed by the waste generator, used to track and substantiate the disposition of asbestos-containing waste material. (Adopted December 4, 1991)
- 11-2-241 **Working Day:** Monday through Friday, including holidays that fall on any of the days Monday through Friday. (Adopted December 4, 1991)

11-2-300 STANDARDS

- 11-2-301 **Prohibited Operations:** The following operations are prohibited:
- 301.1 The surfacing of roadways with asbestos tailings or asbestos-containing wastes except for temporary roadways on an area of asbestos deposits. The deposition of asbestos tailings on roadways covered with snow or ice is considered "surfacing."
 - 301.2 Molded insulating materials which are friable, and wet-applied insulating materials which are friable after drying, installed after the effective date of this Regulation, shall contain no commercial asbestos.
 - 301.3 The spraying of any substance containing any amount of asbestos in or upon a building or other structure during its construction, alteration or repair. (Amended September 5, 1990)
- 11-2-302 **Visible Emissions:** There shall be no visible emissions to the outside air from any asbestos mill or from any operation involving the manufacture or fabrication of any product containing asbestos.
- 302.1 Rather than meet the no visible emission requirements as specified by Section 11-2-302, a person may elect to use air-cleaning to clean emissions containing particulate asbestos material before such emissions escape to, or are vented to, the outside air. Each owner or operator must meet the following requirements:

302.1.1 Monitor each potential source of asbestos emissions from any part of the mill, manufacturing, or fabricating facility, including air cleaning devices, process equipment and buildings that house equipment for material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operation. The monitoring shall be visual observation as specified in Section 11-2-604.

302.1.2 Inspect each air cleaning device at least once each week for proper operation and maintenance, including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected weekly, submit a written maintenance plan to the APCO as specified in Section 404. If the use of fabric filters creates a fire or explosion hazard, the APCO may authorize the use of wet collectors designed to operate with a unit contacting energy of at least 9963 pa (40 in.) water gauge pressure. All air cleaning equipment authorized by this Regulation must be properly permitted, installed, used, operated and maintained. By-pass devices may be used only during emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material. (Amended 9/5/90; 12/4/91)

11-2-303 Demolition, Renovation, and Removal: To prevent emissions from asbestos-containing material, a person responsible for scheduled or emergency demolition, renovation, or removal of any building elements containing any amount of RACM shall use the procedures specified in Sections 303.1 through 303.11. This shall not apply to maintenance or decontamination procedures where no removal takes place.

303.1 Wetting Method: All exposed RACM shall be adequately wetted and kept wet during cutting, stripping, demolition, renovation, removal and handling operations both inside and outside of a building, except when the methods specified in Sections 11-2-303.2 and 11-2-303.4 are used. Wetting requirements are suspended when the temperature at the point of wetting is below 0°C (32°F) in which case elements of RACM shall be removed in units or in sections to the maximum extent possible.

303.2 Exhaust and Collection Method: In lieu of wetting, a local HEPA exhaust, ventilation, and collection system designed and operated to capture the emissions from RACM and prevent any visible emissions to the outside air may be used during 1) stripping of any element that has been removed as a unit or in sections, in accordance with Section 11-2-303.4; 2) to prevent emissions of particulate asbestos-containing material to the outside air when damage to equipment resulting from wetting would be unavoidable; 3) shotblasting of mastic. Approval for dry removal of RACM must be received from the APCO; requests for approval of dry removal must be in writing.

303.3 Scheduling of Demolition Activities: RACM shall be removed prior to other demolition or other operations that would either break up or preclude access to the RACM for subsequent removal.

303.4 Removal in Units: Elements that have RACM may be removed at any time in units or sections so long as the exposed RACM during cutting or disjoining is adequately wetted or encapsulated to prevent emissions of particulate asbestos material. Such sections if elevated shall be carefully

lowered to ground level, where they are to be abated in accordance with Section 11-2-303.1 and/or Section 11-2-303.2.

- 303.5 Removal By Chute or Container:** All RACM not removed in units or sections shall be adequately wetted and kept wet in accordance with Section 11-2-303.1, and transported to the ground in leak-tight chutes or containers, utilizing negative air and HEPA equipment.
- 303.6 Containment Requirement:** Any building, structure, room, facility or installation from which RACM is being stripped or removed shall be isolated by physical barriers from the outside air to the extent feasible as determined by the APCO. Such barriers shall include transparent viewing ports which allow observation of all stripping and removal of RACM from outside the barrier. The negative air pressure inside the isolated work area shall be maintained at a pressure differential relative to adjacent, non-isolated areas to the extent feasible. The negative air pressure ventilation equipment shall be operated continuously from the establishment of isolation barriers through final clean-up of the work area following stripping or removal of RACM. The provisions of this Section shall not apply to a removal done entirely by the glovebag method, a removal using a mini-enclosure designed and operated according to Appendix G to 29 CFR Section 1926.58, a removal of one square foot or less done in accordance with Section 11-2-303.1 and using a local HEPA exhaust, ventilation and collection system, or a removal using any other engineering control technique approved by the APCO. The requirement to maintain negative air pressure shall not apply to outdoor pipeways at industrial facilities; however, these jobs shall be contained by plastic barriers to the extent feasible to prevent visible emissions of RACM.
- 303.7 Clean Work Site Requirement:** All friable asbestos-containing waste material related to a specific demolition, renovation or removal, including pre-existing debris, shall be handled in accordance with the provisions of Sections 11-2-303 and 11-2-304.
- 303.8 Surveys:** Prior to commencement of any demolition or renovation, the owner or operator shall thoroughly survey the affected stationary structure or portion thereof for the presence of RACM. Effective July 1, 1992, the survey shall be performed by a person who is certified by the Division of Occupational Safety and Health pursuant to regulations required by subdivision (b) of Section 9021.5 of the Labor Code, and who has taken and passed an EPA-approved Building Inspector course and who conforms to the procedures outlined in the course. The survey shall include sampling and laboratory analysis of the asbestos content of all suspected asbestos-containing materials. This Section shall not apply if the owner or operator asserts that the material to be renovated is RACM and will be handled in accordance with the provisions of Sections 11-2-303, 304 and 401. The requirement for certification by the Division of Occupational Safety and Health pursuant to Section 9021.5 of the Labor Code shall not apply to in-house health professionals within a specific non-asbestos related company who perform occasional surveys only for that company as part of their regular job responsibilities. (Adopted 12/4/91)
- 303.9 On-Site Representative:** Effective November 20, 1991, no RACM shall be stripped or removed unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, certifies that he or she is familiar with the provisions of this rule as it pertains to demolition and renovation and the means of compliance therewith, and is present during all stripping and removing of RACM. The

required training shall include: applicability of the regulation, notifications, procedures, material identification, and control procedures for removals, including: adequate wetting, local exhaust ventilation and HEPA filtration, negative pressure enclosures, glove-bag procedures, waste disposal work practices, and reporting and record keeping requirements. Evidence that the required training has been completed shall be posted on-site and made available for inspection by the APCO. This Section shall not apply to RACM stripped or removed from an owner-occupied single-family dwelling by the owner.

(Adopted 12/4/91)

303.10 RACM Discovered After Demolition: If RACM is not discovered until after demolition begins and as a result of the demolition cannot be safely removed, the asbestos-contaminated debris shall be treated as asbestos-containing waste material and kept adequately wet at all times until disposed of according to the provisions of Section 11-2-304. Immediately the RACM is discovered the owner or operator shall comply with the provisions of Sections 11-2-303.1, 303.6 and 401.3. (Adopted 12/4/91)

303.11 Ordered Demolition: The owner or operator of any demolition of any building or other stationary structure pursuant to an order of an authorized representative of a state or local governmental agency, issued because that building is structurally unsound and in danger of imminent collapse, or has been declared a public nuisance, shall comply with the wetting requirements of Section 11-2-303.1 and the disposal requirements of Section 11-2-304. (Adopted December 4, 1991)

11-2-304 Waste Disposal: To prevent emissions from asbestos-containing material, a person responsible for the collection, processing (including incineration and conversion), packaging, transporting, or disposition of any asbestos-containing waste material which is generated by manufacturing, fabricating, scheduled or emergency demolition or renovation, spraying operations or asbestos mills, shall use the following procedures:

304.1 The person responsible for any demolition, renovation or removal of RACM, or for any source other than an asbestos mill may elect to use either of the following disposal methods or an alternative disposal method which has received prior approval by the APCO:

304.1.1 Treatment of asbestos-containing waste material with water.

Control device asbestos waste shall be thoroughly mixed with water into a slurry and other asbestos-containing waste material shall be adequately wetted and kept wet. There shall be no visible emissions to the outside air from the collection, mixing and wetting operations, except as permitted in Sections 11-2-110 and 11-2-302.1. After wetting, and while still wet, all asbestos-containing waste material shall be sealed into leak-tight containers prior to being removed from containment as specified in Section 11-2-303.6. Such containers shall remain leak-tight and be deposited at waste disposal sites which are operated in accordance with the provisions of Section 11-2-304. The containers shall be labeled with the name of the waste generator and the location (address) from which the waste was generated. Containers shall also include an OSHA-approved asbestos warning label, as specified in 29 CFR 1910.1001(j)(2) or

1926.58(k)(2)(iii). These labels must be printed in letters of sufficient size and contrast to be readily visible and legible.

304.1.2 Processing of asbestos-containing waste material into nonfriable forms. All asbestos-containing waste material shall be formed into nonfriable pellets or other shapes and deposited at waste disposal sites which are operated in accordance with this regulation. There shall be no visible emissions to the outside air from this collection and processing of asbestos-containing waste material except as permitted in Sections 11-2-110 and 11-2-302.1. For the purposes of this section, the term "all asbestos-containing waste material" as applied to demolition and renovation operations covered by Section 11-2-303 includes only friable asbestos waste and control device asbestos waste.

304.1.3 Conversion of RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material: Each owner or operator of a conversion operation shall comply with Sections 11-2-402 and 11-2-504 of this Regulation.

304.2 Rather than meet the requirements of Section 11-2-304, the person responsible for an asbestos mill may elect to meet the following requirements or use an alternative disposal method which has received prior approval by the APCO:

304.2.1 There shall be no visible emissions to the outside air from the transfer of control-device asbestos waste to the tailings conveyor, except as permitted in Sections 11-2-110 and 11-2-301.1. Such waste shall be subsequently processed in accordance with this Regulation.

304.2.2 All asbestos-containing waste material shall be adequately mixed with a wetting agent prior to disposition at a waste disposal site. Such wetting agent shall be used as recommended for the particular dust by the manufacturer of the agent. There shall be no visible emissions to the outside air from the wetting operation except as permitted in Sections 11-2-110 and 11-2-302.1. Wetting may be suspended when the ambient air temperature at the waste disposal site is less than -9.5°C (15°F). The ambient air temperature shall be determined by an appropriate measurement method with an accuracy of +1°C or +2°F and recorded at least at hourly intervals during the period that the operation of the wetting system is suspended.

304.3 All asbestos-containing waste material shall be deposited at waste disposal sites operated in accordance with this Rule.

304.4 For demolitions where the RACM is not removed prior to demolition pursuant to Section 11-2-303.11, the asbestos-containing waste material shall be kept adequately wetted at all times after demolition, during handling and loading and shall be sealed in leak-tight containers for transport to a disposal site.

304.5 All vehicles used to transport asbestos-containing waste material shall be marked as specified in 29 CFR 1910.145 and this Section during the loading and unloading of waste. The signs shall be visible and shall be displayed in such a manner that a person can easily read the legend:

DANGER
ASBESTOS DUST HAZARD

**CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY**

304.6 The owner or operator of all asbestos-containing waste material, generated as a result of demolition or renovation activities, which is transported off the facility site shall meet all of the following requirements:

304.6.1 Maintain a waste shipment record as specified in Section 11-2-502.

304.6.2 Provide a copy of the waste shipment record referenced in Section 11-2-304.6.1 to the disposal site owner or operator at the same time the asbestos-containing waste material is delivered to the disposal site.

304.6.3 Contact the transporter and/or the owner or operator of the disposal site to determine the status of the waste shipment, if the waste shipment record referenced in Section 11-2-304.6.1, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter.

304.6.4 Provide a written report to the APCO if a copy of the waste shipment record referenced in Section 11-2-304.6.1, signed by the owner or operator of the disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. The following information shall be included: A copy of the waste shipment record referenced in Section 11-2-304.6.1 for which a confirmation of delivery was not received, and a letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

(Amended 9/5/90; 12/4/91)

11-2-305 Waste Disposal Sites: There shall be no visible emissions to the outside air from a waste disposal site where asbestos-containing waste material has been or is being deposited.

305.1 Warning signs shall be displayed at all entrances, and along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited, at intervals of 100m (330 ft) or less. Warning signs and fencing are not required where the requirements of Sections 11-2-305.3.1 and 11-2-305.3.2 are met, or where a natural barrier adequately deters access by the general public. Upon request and supply of appropriate information, the APCO will determine whether a fence or a natural barrier adequately deters access to the general public; and

305.2 The perimeter of the site shall be fenced in a manner adequate to deter access by the general public, except as specified in Section 11-2-305.1.

305.3 Rather than meet the requirements of Section 11-2-305.1 and 11-2-305.2, a person may elect to meet the following requirements or may use an alternative control method for emissions from a waste disposal site which has received prior approval by the APCO.

305.3.1 For an inactive site, the asbestos-containing waste material shall be covered with at least 15 cm (6 in) of compacted non-asbestos-containing material and a cover of vegetation shall be grown and maintained on the area adequate to prevent exposure of the asbestos-containing waste material; or the asbestos-containing waste material shall be covered with at least 61 cm (2

ft) of compacted non-asbestos-containing material and maintained to prevent exposure of the asbestos-containing waste.

305.3.2 For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent which effectively binds dust and controls wind erosion shall be applied. Such agent shall be used as recommended for the particular asbestos tailings by the dust suppression agent manufacturer. Other equally effective dust suppression agents may be used upon prior approval by the APCO. For purposes of this Section waste crankcase oil is not considered a dust suppression agent.

305.3.3 For an active waste disposal site, at the end of each operating day, or at least once every 24-hour period while the site is in continuous operation, the asbestos-containing waste material which was deposited at the site during the operating day or previous 24-hour period shall be covered with at least 15 cm (6 in.) of compacted non-asbestos-containing material or with a resinous or petroleum-based dust suppression agent which effectively binds dust and controls wind erosion. Such dust suppression agent shall be used as recommended for the particular dust by the dust suppression agent manufacturer. Other equally effective dust suppression agents may be used upon prior approval by the APCO. For purposes of this Section, waste crankcase oil is not considered a dust suppression agent.

305.4 For an active waste disposal site, the owner or operator shall:

305.4.1 Maintain waste shipment records as specified in Section 11-2-503 for all asbestos-containing waste material received.

305.4.2 Send a copy of the signed waste shipment record to the waste generator, as soon as possible, and in no case longer than 30 days after the receipt of the waste:

305.4.3 Upon discovering a discrepancy between the quantity of asbestos-containing waste material noted in the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the APCO. Describe the discrepancy and attempts to resolve it, and include a copy of the waste shipment record.

(Amended 9/5/90; 12/4/91)

11-2-400 ADMINISTRATIVE REQUIREMENTS

11-2-401 **Reporting Demolition and Renovation:** The person responsible for any existing source to which this Rule is applicable shall provide to the APCO a description of the emission control equipment used for each process and the following information:

401.1 For active waste disposal operations a brief description of each process that generates asbestos-containing waste material; the average weight of asbestos-containing waste material disposed of, measured in kg/day; the emission control methods used in all stages of waste disposal; and the type of disposal site or incineration site used for ultimate disposal, including the name of the site operator and the name and location of the disposal site.

- 401.2 For inactive waste disposal sites a brief description of the site and the method or methods used to comply with the standard, or alternative procedures to be used.
- 401.3 For every demolition even where no RACM is present, and for each renovation operation where the amount of RACM is greater than or equal to 30.8m (100 ft.) linear, 9.4m² (100 ft.²) or 1 m³ (35 ft.³), a written plan or notification of intent to demolish or renovate shall be provided to the APCO at least ten (10) working days prior to commencement of demolition or renovation, or as early as possible prior to commencement of emergency demolition or renovation. Such notification shall include the following information:
- 401.3.1 Indicate whether the notification is the original or a revision.
- 401.3.2 The name, address and telephone numbers of both the owner(s) of the structure and the operator of the demolition or renovation.
- 401.3.3 A description of the structure being renovated, including the size, number of floors, age of the oldest portion, and the present and prior use of the structure.
- 401.3.4 An estimate of the approximate amount of RACM to be removed from the structure or portion thereof, in terms of length of pipe in linear feet, surface area in square feet, or volume in cubic feet if the material is not attached to facility components.
- 401.3.5 The name, address and telephone number of the person who completed the asbestos survey as specified in Section 11-2-303.8
- 401.3.6 The procedures used, including the analytical laboratory method employed, to locate and identify the presence of RACM and Category I and Category II nonfriable asbestos-containing material.
- 401.3.7 The address and location (including building number or name and floor or room number, as applicable) of each structure where demolition or renovation will occur.
- 401.3.8 Accurate starting and completion dates of demolition or renovation.
- 401.3.9 A description of planned demolition or renovation and method(s) to be employed.
- 401.3.10 A description of work practices and engineering controls to be used including emission control procedures for asbestos removal and waste handling.
- 401.3.11 The name, address and location of the waste disposal site where the asbestos-containing waste material will be deposited.
- 401.3.12 A copy of the order to demolish including the name, title, and authority of the state or local governmental representative who has ordered a demolition pursuant to Section 11-2-303.11.
- 401.3.13 Effective November 20, 1991, certification that at least one person, trained as required by Section 11-2-303.9, will supervise the asbestos removal described in this plan.
- 401.3.14 Description of the procedures to be followed in the event that unexpected RACM is found or Category II nonfriable asbestos-containing material becomes friable.
- 401.3.15 The name, address and telephone number of the waste transporter. Such notification shall be typewritten or computer

printed and submitted on a District-approved form or facsimile thereof.

401.4 Deleted September 5, 1990

401.5 Schedule Changes and Up-dates: Any changes to any aspect of a notification submitted in accordance with Section 11-2-401.3 must be reported to the APCO. These changes shall include, but are not limited to, changes in the notified starting or completion dates, changes of amounts of RACM to be removed, and changes of contractor or waste disposal site. It shall be the responsibility of the person making the initial notification of intent to remove asbestos to ensure that the APCO is notified of any such changes. If a job starts prior to the reported starting date or continues past the scheduled completion date as shown in the notification of intent to remove asbestos, this shall constitute a failure to notify. Failure to notify the APCO of a job cancellation or postponement will result in the imposition of such asbestos operations fees as would have been due had the job not been cancelled or postponed.

(Amended 5/20/81, 3/5/86, 7/6/88, 9/5/90; 12/4/91)

11-2-402 Approval of Conversion Operation: To obtain approval for a conversion operation pursuant to Section 11-2-304.1.3, the owner or operator shall provide the APCO with the following:

402.1 An application for Authority to Construct including the following: descriptions of waste feed handling and temporary storage, process operating conditions, handling and temporary storage of the end product, and a description of the protocol to be followed when analyzing output materials by Transmission Electron Microscopy (TEM) as described in Section 11-2-605; a demonstration of the conversion process upon request of the APCO, and a protocol for the start-up performance test as described in Sections 11-2-504 and 11-2-607.

402.2 A report for each analysis of product composite samples performed during the initial 90 days of operation.

402.3 A quarterly report, including the following information concerning activities during each consecutive three (3) month period: results of analyses of monthly product composite samples; a description of any deviation from the operating parameters, including its duration, and any corrective action taken; disposition of any products produced during a period when the operating parameters were outside the range indicative of asbestos-free; and information on waste disposal activities as required in Section 11-2-305.

(Adopted December 4, 1991)

11-2-403 Excavating or Disturbing Asbestos-Containing Waste: The owner or operator of an active waste disposal site referenced in Section 11-2-305 shall notify the APCO in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one stated in the original notice, notice of the new start date shall be provided to the APCO at least 14 days before excavating begins. In no event shall excavation begin earlier than the date specified in the original notification. The notice shall include: ~~scheduled starting and completion dates; reasons for disturbing the wastes; procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material; and location of any temporary storage site and the final disposal site.~~ (Adopted December 4, 1991)

11-2-404 Maintenance Plan: Asbestos Milling, Manufacturing and Fabrication Facilities: Asbestos milling, manufacturing and fabrication facilities subject to Section 11-

2-302.1.1 shall submit a written maintenance plan to the APCO. This plan shall include the following information: maintenance schedule; recordkeeping plan; and maintenance records of the results of visible emissions monitoring and air cleaning device inspections including the following: date and time of each inspection; presence or absence of visible emissions; condition of fabric filters, including presence of tears, holes and abrasions; presence of dust deposits on clean side of filter; brief description of corrective actions taken, including date and time; and daily hours of operation for each air cleaning device. On a quarterly basis, submit a copy of visible emissions monitoring records if visible emissions occurred during the reporting period. Quarterly reports shall be postmarked by the 30th day following the end of the calendar quarter. (Adopted December 4, 1991)

11-2-500 MONITORING AND RECORDS

11-2-501 Temperature Records: Records of temperature measurements as required by Section 11-2-304.2.2 shall be retained by the operator for a minimum of two (2) years and made available for inspection by the APCO. (Amended 12/4/91)

11-2-502 Waste Shipment Records: Waste shipment records as required by Section 11-2-304.6 shall include the following information:

502.1 The name, address, and telephone number of the waste generator.

502.2 The name and address of the local Air Quality Management District in which the waste was generated.

502.3 The approximate amount of waste in cubic yards.

502.4 The name and telephone number of the disposal site operator.

502.5 The name and physical location of the disposal site.

502.6 The name, address, and telephone number of the transporter(s).

502.7 A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway. Records shall be retained by the waste generator for a minimum of two (2) years and made available for inspection by the APCO.

(Adopted December 4, 1991)

11-2-503 Active Waste Disposal Site Records:

503.1 Waste Shipment Records: Waste shipment records as required by Section 11-2-305.4 shall include the following information:

503.1.1 The name, address and telephone number of the waste generator.

503.1.2 The name, address and telephone number of the transporter(s).

503.1.3 The quantity of the asbestos-containing waste material in cubic yards.

503.1.4 The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. If this condition exists, report in writing to the APCO by the following working day. Submit a copy of the waste shipment records along with the report.

503.1.5 The date of receipt.

Records shall be retained by the waste disposal site operator for a minimum of two (2) years and made available for inspection by the APCO.

503.2 Asbestos Waste Location Records: Maintain, until closure, records of the location, depth and area, and the quantity in cubic yards of asbestos-containing waste material within the disposal site on a map or diagram of

the disposal area. Upon closure of the facility, submit a copy of records of asbestos waste disposal locations and quantities to the appropriate Local Enforcement Agency. (Adopted 12/4/91)

- 11-2-504 Conversion Operations:** The owner or operator of a conversion operation shall maintain the following records: results of the start-up performance testing and all subsequent performance testing, including operating parameters, feed characteristics and analyses of output materials; results of the composite analyses, continuous monitoring and logs of process operating parameters required in Section 11-2-607; the waste shipment records including the information required in Section 11-2-503 for all asbestos-containing waste received; and the name and location of the purchaser or disposal site and the date of sale or deposit for output materials.
A person subject to this rule shall maintain records for two (2) years and make the records available for inspection by the APCO upon request. (Adopted 12/4/91)

11-2-600 MANUAL OF PROCEDURES

- 11-2-601 Waste Disposal Warning Labels:** Warning labels required by Section 11-2-304.1.1 must be as specified in the Manual of Procedures or by the Occupational Safety and Health Administration.
- 11-2-602 Warning Signs for Waste Disposal Sites:** Warning signs required by Section 11-2-305.1 must be as specified in the Manual of Procedures.
- 11-2-603 Bulk Sampling Analysis:** Asbestos bulk samples as specified in Section 11-2-209 shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 40, or by the method specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1.7.2.4, Polarized Light Microscopy, Quantification of Asbestos Content.
(Adopted 9/5/90; Amended 12/4/91)
- 11-2-604 Visible Emissions:** Visible emissions of asbestos-containing dust shall be made as prescribed in The Manual of Procedures, Volume 1. (Adopted 12/4/91)
- 11-2-605 Asbestos Content-TEM:** When so indicated, asbestos content shall be determined using the National Institute of Standards and Technology (NIST) approved Transmission Electron Microscopy (TEM) method. (Adopted 12/4/91)
- 11-2-606 Fabric Filters:** The airflow permeability of fabric filters shall be as specified by ASTM Method D737-69. (Adopted December 4, 1991).
- 11-2-607 Conversion Facility Performance Test:** Prior to start up of an asbestos conversion facility subject to sections 11-2-402 and 11-20-504, an owner or operator must conduct a start-up performance test as specified in 40 CFR Part 61.155(b). Operations tests shall be performed as specified in 40 CFR Part 61.155(c) and (d).

(Adopted December 4, 1991)



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

COMPLIANCE ASSISTANCE ADVISORY

October 13, 1992

TO: INTERESTED PARTIES
FROM: DIRECTOR OF ENFORCEMENT *[Signature]*
SUBJECT: NEW ASBESTOS SURVEY REQUIREMENT

The BAAQMD asbestos rule (Regulation 11, Rule 2) requires a survey for asbestos before any demolition or renovation work can be performed. Renovation is defined as an operation other than demolition in which Regulated Asbestos-Containing Material (RACM) is removed. A copy of the survey must accompany the notification for a job and both must be received by the District office ten (10) working days prior to the start date for the job. The mailing of the survey becomes effective on December 1, 1992. There is a single exception to the survey requirement: no survey is required for a renovation if the owner or operator states that the renovation involves asbestos, identifies the material that contains asbestos, and certifies that all asbestos-containing material will be handled in accordance with the District rule.

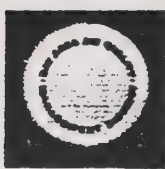
All surveys must be done by a person:

1. Who is certified by the Division of Occupational Safety and Health (Cal/OSHA); and
2. Who has taken and passed an EPA-certified building inspector course; and
3. Who applies the procedures outlined in the EPA-certified course.

There is one exception to these certification requirements. Certification is not required of in-house health professionals within a non-asbestos related company who perform occasional surveys only for that company as part of their regular job responsibilities. This exception applies only to a regular employee of a company, typically an environmental engineer or occupational health professional, and does not apply to a consultant, contractor, part-time or temporary employee.

Asbestos consultants are listed in the yellow pages. To determine whether a person is certified by Cal/OSHA, you should ask the person if he/she is a Cal/OSHA "certified" asbestos consultant. Any person who is certified should be able to produce a signed certificate from Cal/OSHA. Only individuals, not firms, may be "certified." A person or firm merely "registered" with Cal/OSHA does not meet the requirements of the BAAQMD rule. Upon request, the District will provide free of charge a list of Cal/OSHA certified consultants/technicians.

RKLtg



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 ELLIS STREET
SAN FRANCISCO, CALIFORNIA 94109
(415) 771-6000

Asbestos Demolition/Renovation NOTIFICATION FORM

BAAQMD J# _____

Site Information

Site Address _____

City _____ Zip _____

Owner Name _____ Phone () _____

Specific Location of Project _____

☐ Single Family Dwelling ☐ Commercial ☐ Apartment Building ☐ Government Building ☐ School

☐ Renovation ☐ Demolition - Fire Training Yes _____ No _____ ☐ Planned Renovation* (as per Reg. 11-2-216)

☐ Weekend Work ☐ Night Work (After 5 PM) * (Attach Work Schedule)

☐ Cumulative Renovations (each less than 100 square or linear feet)

Start Date _____ Completion Date _____

Material Description: _____

Method(s) of Removal: _____

☐ Check box if dry removal. In addition to filling this form, please attach a letter requesting conditional approval for dry removal.

(This includes, but is not limited to, shot/bead blasting of mastic.)

Total removal amounts of friable asbestos material only: ** _____ lin ft/ _____ sq ft/ _____ cu ft

* Indicate how much of this involves dry, bead-blast, or shot-blast removal: _____

BAAQMD N# _____

Contractor Information

Name _____ Contact _____

Mailing Address _____ Phone () _____

City _____ Zip _____ Contractor Job No. _____

BAAQMD N# _____

Disposal Site Information

Landfill Name _____

City _____ State _____

This form prepared by _____ Title _____

Company _____ Address _____

City, state, zip _____ Phone () _____

Waste Transporter Information

Name _____ EPA I.D. # _____
Address _____ City _____
Zip _____ Phone () _____ Contact _____

Survey Information

Name of person who completed the survey _____ Company Name _____
Address _____ City _____ Zip _____
Phone () _____

Procedure, including analytical laboratory method employed, to locate and identify the presence of RACM. PLM is the required method. _____

Is asbestos present? Yes _____ No _____

Government Ordered Demolition

Name _____ Title _____
Agency _____ Phone () _____
Date of Order Authorizing Ordered Demolition _____

Emergency Renovation

Date and Hour of Emergency _____
Description of event and an explanation of how the event has caused unsafe conditions or would cause equipment damage.

I certify that an individual trained in the provisions of this regulation (40 CFR Part 61, Subpart M) will be on site during the demolition or renovation and evidence that the required training has been accomplished by this person and will be available for inspection during normal business hours.

Signature of Contractor

Date

I certify that the above information is correct, and that I will comply with all of the requirements of the BAAQMD's Regulations, as well as all other applicable federal, state, and local requirements.

Signature of Contractor

Date

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 Ellis Street
San Francisco, CA 94109
(415) 771-6000

INSTRUCTIONS AND GENERAL INFORMATION

- Notifications must be complete to be considered in compliance with BAAQMD Regulations 11-2-401.3 and 11-2-401.4. Notifications lacking information will be returned. The ten-working day notification period will not start until a complete notification is submitted.
- This notification form may be used to notify the BAAQMD of demolition or asbestos removal (renovation) operations. Each of these operations requires separate notification. An Acknowledgement Letter will be mailed to the contractor within 2 or 3 days of receipt of the notification.
- Revisions to the information stated in the notification form can be made by phone, but must be followed up in writing using the Acknowledgement Letter form.
- If the job is postponed or cancelled, you must notify the District prior to the notified completion date or you will be subject to the applicable asbestos operations fee. If a job starts prior to the reported starting date or continues past the scheduled completion date as shown in the notification, this shall constitute a failure to notify.
- Notification is required for each renovation operation where the amount of Regulated Asbestos-Containing Material (RACM) is greater than or equal to 100 sq ft/linear or 35 cu ft.
- Notification is required for every demolition even where no Regulated Asbestos-Containing Material (RACM) is present.
- BAAQMD Regulation 11-2-401.3 requires that notification shall be provided to the APCO at least ten-working days prior to commencement of demolition/renovation, or as early as possible prior to commencement of emergency demolition/renovation. Section 401.3.15 requires that notification shall be submitted on a District-approved form (attached).
- Regulation 3, Schedule L authorizes fees for demolition/renovation operations. The contractor listed on the notification form is responsible for the payment of these fees, and will be invoiced after the completion of the job. Contact the BAAQMD at the telephone number listed below for further information on fees.
- Issuance of a BAAQMD Job # is not intended as a verification of compliance with District Regulation 11-2 or applicable federal, state or local requirements.

INSTRUCTIONS:

SPECIFIC LOCATION OF PROJECT: Indicate where the Demolition/Renovation is taking place within the Site Address.

Examples:

- Building 100A, 3rd floor
- Basement boiler room
- Medical building, Wing 2A

START DATE: Indicate a correct and accurate Start Date, not a prospective date. The Start Date is the date on which Regulated Asbestos-Containing Material (RACM) removal commences or the date on which demolition of the structure commences. Any change of start date must be notified prior to the date originally notified for the job. Under no circumstances may the revised Start Date be earlier than the tenth

working day following the postmark of the original notification, unless an emergency notification has been made (see below).

MATERIAL DESCRIPTION: Indicate the type of friable asbestos material being removed.

Examples:

- . Pipe lagging and acoustical ceiling
- . Thermal system insulation
- . Asbestos insulated heating ducts

If notification is for demolition activity, indicate type of structure:

Examples:

- . Wood
- . Brick

DEMOLITION-FIRE TRAINING: Regulation 11-2-206 defines demolition as wrecking, intentional burning or dismantling of any structural element or all of a building. Notification is required if a structure is to be burned for fire training purposes. The ten-working day notification requirement must be met before commencement of fire training. Additionally, the District's Open Burning Notification Form must be sent to the District and the requirements of Regulation 5 must be met.

METHODS OF REMOVAL: Indicate the methods and procedures you will employ to comply with the District's Regulation 11-2 and EPA's 40 CFR 61.147 and 152. If method of asbestos removal involves dry removal, check dry removal box. Attach a letter to the notification form requesting conditional approval for dry removal. The letter must specify methods and procedures to be used to comply with Regulation 11-2-303.2. EPA Region IX must also be notified of dry removal. Contact them at (415) 744-1135.

If notification is for demolition activity, indicate method of demolition.

Examples:

- . Backhoe
- . Wrecking ball
- . Demolition by hand

REMOVAL AMOUNT: Indicate the amount of Regulated Asbestos-Containing Material (RACM) to be removed. If the job involves wet and dry removal, indicate the total for both. Indicate how much of this total amount involves dry removal on the following line. **Note:** Non-friable asbestos material is exempt from notification unless it is made friable during demolition, renovation or removal (see Regulation 11-2-209).

Regulated Asbestos-Containing Material (RACM) must be removed prior to demolition operations. The amount of asbestos for demolition notification is zero (0) amount.

EMERGENCY NOTIFICATION NUMBER: Under certain conditions, the ten-working day notification period may be waived. However, notification must be made by telephone. If the reason for proceeding immediately is deemed appropriate, you will be issued an emergency job number at this time. You must then submit the completed notification form and reference the emergency notification number in the upper right corner (BAAQMD J# ____). **Note:** All notices submitted under the Emergency Notification Procedure are subject to verification and approval by the District's inspection staff. EPA Region IX must also be notified of emergency asbestos demolition/renovation. Contact them at (415) 744-1135.

CONTRACTOR: Indicate the name of the contractor who is performing the demolition/renovation.

CONTRACTOR JOB NO.: Indicate your reference number, if any.

DISPOSAL SITE INFORMATION: Indicate the name of the disposal site where the Regulated Asbestos-Containing Material (RACM) will be deposited. All RACM must be removed prior to commencement of demolition operations.

WASTE TRANSPORTER INFORMATION: Indicate the name of the transporter of the Regulated Asbestos-Containing Material (RACM). The state of California considers RACM a hazardous waste. Therefore, a contractor is required to obtain an E.P.A. number to qualify as a hauler of waste.

SURVEY INFORMATION: Prior to commencement of any demolition or renovation, a survey shall be performed for the presence of Regulated Asbestos-Containing Material (RACM). This section is not applicable if the material to be renovated is declared as RACM and will be handled in accordance with the provisions of Regulation 11-2.

GOVERNMENT ORDERED DEMOLITION AND EMERGENCY RENOVATION: Reference the Emergency Notification procedure indicated above. EPA Region IX must also be notified.

FAX: Notifications may be faxed to (415) 928-0338

<p>For additional information contact the District's Air Quality Technician responsible for Asbestos Notifications at (415) 771-6000, extension 4762.</p>

ASBESTOS OPERATIONS

Effective January 1, 1998, fees for asbestos operations (demolitions and renovations) will be increased as outlined in the following tables. *The new fees will apply to notifications postmarked on or after January 1, 1998.*

OPERATION FEES - OTHER THAN SINGLE FAMILY DWELLINGS*

Square Feet Renovation	Linear Feet Renovation	Fee
100-159	100-259	\$210
160-500	260-500	\$305
501-1000	501-1000	\$445
1001-2500	1001-2500	\$655
2501-5000	2501-5000	\$935
5001-10000	5001-10000	\$1285
10001+	10001+	\$1635
Demolition Only	Demolition Only	\$150

OPERATION FEES - SINGLE FAMILY DWELLINGS*

Square Feet Renovation	Linear Feet Renovation	Fee
100-500	100-500	\$75
501-1000	501-1000	\$275
1001-2000	1001-2000	\$400
2001+	2001+	\$550
Demolition Only	Demolition Only	\$35

* A portion of the fee, \$35 for single family dwellings and \$100 for other types will be nonrefundable.

ACTIVE ASBESTOS LANDFILLS

Altamont Landfill 10840 Altamont Pass Road Livermore, CA 94550 (510) 449-6349	N#7493	Chemical Waste Management-West 35251 Old Skyline Road Highway 41 Kettleman City, CA 93238 (209) 386-9711	N#7156
Anderson Landfill 18703 Cambridge Road P.O. Box 1365 Anderson, CA 96007	N#7070	West Contra Costa Sanitary Landfill Foot of Parr Blvd P.O. Box 4070 Richmond, CA 94804-0070 (510) 262-1615	N#6359
B & J Landfill 6426 Hay Road Vacaville, CA 95688 (707) 451-3276	N#7308	Potrero Hills Sanitary Landfill 3675 Potrero Hills, Ln., off Hwy 12 Suisun, CA 94585 (707) 429-9600	N#7570
Forward Landfill 9999 South Austin Road Manteca, CA 95736 (209) 982-4298	N#7071	Grass Mt. Facility 7 Miles North of Knowll E., I-80 Clive, UT 84074 (801) 534-0054	N#7409
Pen Rob Landfill 3 Miles North of I-40 Avenue Joseph City, AZ 86032 (602) 288-3560	N#7074	California Asbestos Monofill #1 Copperopolis Street P.O. Box 127 Copperopolis, CA 95228 1-800-852-4031	N#8110
BKK Landfill 2210 Azusa Avenue West Covina, CA 91791 (818) 965-0911	N#8660	BFI Azusa Land Reclamation Co. 1201 West Gladstone Street Azusa, CA 91702 (818) 334-0718	N#10542
Southwest Disposal Cocopah Indian Reservation Highway 95 & County 15 Somerton, AZ 85350 (602) 783-3234 & 627-9293		Laidlaw Environmental 2500 Lockern Road Buttonwillow, CA 93206 (800) 544-7199	N#9809
Shell Western Exploration & Production 199590 Southern Street McKittrick, CA 93521-9709 (805) 334-3552	N#11119	Butterfield Station Landfill 40404 S. 91st Avenue Mobile, AZ (602) 256-0630	N#11612
Laidlaw Environmental Service 5295 S. Garvey Road Westmoreland, CA 92281 (619) 344-9400	N#12064		

June 23, 1997

REGULATION 11
HAZARDOUS POLLUTANTS

RULE 3
BERYLLIUM

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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 3
BERYLLIUM

11-3-100 GENERAL

- 11-3-101 Description:** The purpose of this Rule is to control the emission of beryllium to the atmosphere. Where weights or concentrations are specified, such weights or concentrations shall apply to the element beryllium only, excluding the weights or concentration of any associated elements.

11-3-200 DEFINITIONS

- 11-3-201 Beryllium Containing Waste:** Material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to this Rule.
- 11-3-202 Extraction Plant:** A plant chemically processing beryllium ore to beryllium metal, alloy, or oxide, or performing any of the intermediate steps in these processes.

11-3-300 STANDARDS

- 11-3-301 Emission Limitation:** A person shall not discharge more than 10 g of beryllium over a 24 hour period from an incineration operation or any plant which processes beryllium, beryllium oxide, beryllium alloys containing more than .1% by weight, or beryllium containing waste; or from machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 5% beryllium by weight.
- 11-3-302 Burning Beryllium By Incineration:** A person shall not burn beryllium and/or beryllium containing waste by any method except an incineration operation. The resulting emissions must comply with this Rule.
- 11-3-303 Ambient Concentration Limits:** Rather than meet the requirements of Sections 11-3-301 or 11-3-302, a person may request approval from the APCO to meet an ambient concentration limit on beryllium in the vicinity of the stationary source of 0.01 ug/m³, averaged over a 30-day period. Approval of this request constitutes a waiver of the requirement for emission testing.

11-3-400 ADMINISTRATIVE REQUIREMENTS

- 11-3-401 Ambient Concentration Limit Conditions:** Approval of a request to meet an ambient concentration limit as designated in Section 11-3-303 may be granted by the APCO provided the following conditions are met:
- 401.1 At least 3 years of data be submitted which in the judgement of the APCO demonstrates that the future ambient concentrations of beryllium in the vicinity of the stationary source will not exceed 0.01 ug/m³, averaged over a 30 day period. Such 3 year period shall be the 3 years ending 30 days before the effective date of this standard as promulgated in 40 CFR 61.
- 401.2 The person requests such approval in writing within 30 days.

401.3 The person submits a report to the APCO within 45 days after the effective date of this Rule which report includes a description of the sampling method, including the method and frequency of calibration; the method of sampling analysis; the averaging technique for determining 30 day average concentrations; the number, identity, and location (address, coordinated, or distance and heading from plant) of sampling site; the ground elevations and height above ground of sampling inlets; the plant and sampling area plots showing emission points and sampling sites. Topographic features significantly affecting dispersion including plant building heights and locations shall be included; information necessary for estimating dispersion, including stack height, inside diameter, exit gas temperature, exit velocity or flow rate, and beryllium concentration; and a description of data and procedures (methods or models) used to design the air sampling network (i.e., number and location of sampling sites).

401.4 Air sampling data required by 401.1 indicating beryllium concentrations in the vicinity of the stationary source for the 3 year period is presented chronologically and includes the beryllium concentration and location of each individual sample taken by the network and the corresponding 30 day average beryllium concentrations.

11-3-402 Approved of Ambient Concentration Limit: Within 60 days after receiving the information required in Section 11-3-401, the APCO will notify the person in writing whether approval is granted or denied. Prior to denying approval to comply with the provisions of Section 11-3-303, the APCO will consult with representatives of the stationary source for which the demonstration report was submitted.

11-3-403 Reporting: Any person subject to the provisions of this Rule shall furnish the APCO writing notification of the anticipated date of initial startup of the source not more than 60 days nor less than 30 days prior to such date, and notification of the actual date of initial startup of the source within 15 days of such date.

11-3-404 Testing: Unless a waiver of emission testing has been obtained from the APCO, the person responsible for emissions is required to source test the emissions within 90 days of startup of any new source operation subject to the emission standards of this Rule. The APCO shall be notified at least 30 days prior to an emission test in order to have the option to conduct or observe the test.

11-3-600 MANUAL OF PROCEDURES

11-3-601 Source Test Methods: Any person subject to the emission limits of this Rule shall use source test methods and procedures as are specified in the Manual of Procedures, Volume IV, ST-2 or EPA-104. (Amended March 17, 1982)

11-3-602 Atmospheric Sampling: The requirements of Section 11-3-303 for monitoring concentration of beryllium, including siting, sampling, and reporting procedures, as described in the Manual of Procedures, Volume VI, Section 3.

(Amended March 17, 1982)

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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 4
BERYLLIUM ROCKET MOTOR FIRING

11-4-100 GENERAL

11-4-101 Description: The purpose of this Rule is to control the emission to the atmosphere of beryllium from rocket motor firing.

11-4-200 DEFINITIONS

11-4-201 Beryllium Propellant: Any propellant incorporating beryllium which undergoes combustion to provide rocket propulsion.

11-4-202 Rocket Motor Test Site: Any plant or installation where static test firing of a beryllium rocket motor and/or the disposal of beryllium propellant is conducted.

11-4-300 STANDARDS

11-4-301 Emissions From Test Sites: A person shall not emit combustion products from rocket motor test sites which cause time weighted atmospheric concentrations of beryllium to exceed 75 microgram minutes per m³ of air within the limits of 10 to 60 minutes, accumulated during any 2 consecutive weeks, in any area in which an effect adverse to public health could occur.

11-4-302 Emissions From Closed Tanks: A person shall not emit beryllium propellant combustion products from a closed tank in excess of 2 g per hour and maximum of 10 g per day.

11-4-400 ADMINISTRATIVE REQUIREMENTS

11-4-401 Notification to APCO of Sampling or Emission Tests: The APCO shall be notified at least 30 days prior to an air sampling test or emission test required by Sections 11-4-301 and 11-4-302 in order to have the option to conduct or observe the test.

11-4-402 Measuring and Sampling: A person responsible for the firing of a beryllium rocket motor subject to Section 11-4-301 shall measure ambient air concentrations during and after firing and shall continuously sample combustion product from a tank subject to Section 11-4-302 so that compliance with standards can be determined.

11-4-600 MANUAL OF PROCEDURES

11-4-601 Test Methods: Test methods and procedures for air sampling test and emission tests required in Section 11-4-402 are specified in the Manual of Procedures, Volume VI, Section 4.
(Amended March 17, 1982)

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HAZARDOUS POLLUTANTS
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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 5
MERCURY

11-5-100 GENERAL

11-5-101 Description: The purpose of this Rule is to control the emission of mercury to the atmosphere.

11-5-200 DEFINITIONS

11-5-201 Condenser Stack Gases: The gaseous effluent emitted from the stack or processes utilizing heat to extract mercury metal from mercury ore.

11-5-202 Hydrogen Gas Steam: A device which is basically composed of an electrolyzer section and a denuder (decomposer) section and utilizes mercury to produce chlorine gas, hydrogen gas and alkali metal hydroxide.

11-5-300 STANDARDS

11-5-301 Discharges From Plants Processing Mercury Ore: A person shall not discharge from plants or operations which process mercury ore, and which use mercury chloralkali cells, more than 2.3 kg of mercury per 24 hour period. Such weight shall include mercury as particulates, vapors, aerosols, and compounds. Such weights or concentrations apply to the element mercury only, excluding the weight or concentration of any associated elements.

11-5-302 Discharges From Sludge Incineration Plants: A person shall not discharge from sludge incineration plants, sludge drying plants or a combination of these that process wastewater treatment plant sludges, more than 3.2 kg of mercury per 24 hour period.

11-5-400 ADMINISTRATIVE PROCEDURES

11-5-401 Testing: Unless a waiver of emission testing has been obtained from the APCO, a person subject to the emission limits of this Rule shall test emissions from the plant within 90 days of any startup of a new source operation.

11-5-402 Reporting: The APCO shall be notified at least 30 days prior to an emission test, in order that the APCO have the option to conduct or observe the test.

11-5-600 MANUAL OF PROCEDURES

11-5-601 Emission Tests: Any person required to make an emission test shall use test methods and procedures as specified in the Manual of Procedures.

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HAZARDOUS POLLUTANTS
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REGULATION 11
HAZARDOUS POLLUTANTS

RULE 6

VINYL CHLORIDE

(Adopted April 21, 1982)

11-6-100 GENERAL

11-6-101 Description: The purpose of this Rule is to control the emissions of vinyl chloride into the atmosphere from plants which produce the following: ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene; vinyl chloride by any process; one or more polymers containing any fraction of polymerized vinyl chloride.

11-6-110 Exemption; Research and Development: This rule shall not apply to equipment used in research and development provided the reactor used to polymerize the vinyl chloride has a capacity of 0.19 m³ (50 gal.) or less. Only the following sections of this rule apply to equipment used in research and development if the reaction used to polymerize the vinyl chloride processed in the equipment has a capacity of greater than 0.19 m³ (50 gal.) and no more than 4.07 m³ (1100 gal.): 11-6-305, 306, 307, 308, 403 and 501.1.

11-6-200 DEFINITIONS

11-6-201 Bulk Resin: Resin which is produced by a polymerization process in which no water is used.

11-6-202 Dispersion Resin: A resin manufactured in such a way as to form fluid dispersions when dispersed in a plasticizer or plasticizer/diluent mixtures.

11-6-203 Emergency Valve Emission: A discharge which could not have been avoided by taking preventive measures.

11-6-204 Ethylene Dichloride Plant: Any plant which produces ethylene dichloride by reaction of oxygen and hydrogen chloride with ethylene.

11-6-205 Ethylene Dichloride Purification: Any part of the process of ethylene dichloride production which follows ethylene dichloride formation and in which finished ethylene dichloride is produced.

11-6-206 Grade of Resin: The subdivision of resin classification which describes it as a unique resin, i.e., the most exact description of a resin with no further subdivision.

11-6-207 Inprocess Wastewater: Any water which, during manufacturing or processing, comes into direct contact with vinyl chloride or polyvinyl chloride or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product containing vinyl chloride or polyvinyl chloride but which has not been discharged to a wastewater treatment process or discharged untreated as wastewater.

11-6-208 In Vinyl Chloride Service: Equipment which contains or contacts either a liquid that is at least 10 percent by weight vinyl chloride or a gas that is at least 10 percent by volume vinyl chloride.

11-6-209 Latex Resin: Resin which is produced by a polymerization process which initiates from free radical catalyst sites and is sold undried.

- 11-6-210 **Polyvinyl Chloride Plants:** Any plant where vinyl chloride alone or in combination with other materials is polymerized.
- 11-6-211 **Reactor:** Any vessel in which vinyl chloride is partially or totally polymerized into polyvinyl chloride.
- 11-6-212 **Reactor Opening Loss:** The emissions of vinyl chloride occurring when a reactor is vented to the atmosphere for any purpose other than an emergency emission as defined in Section 11-6-203.
- 11-6-213 **Run:** The net period of time during which an emission sample is collected.
- 11-6-214 **Slip Gauge:** Gauge which has a probe that moves through the gas/liquid interface in a storage or transfer vessel and indicates the level of vinyl chloride in the vessel by the physical state of the material the gauge discharges.
- 11-6-215 **Standard Operating Procedure:** A formal written procedure officially adopted by the plant owner or operator and available on a routine basis to those persons responsible for carrying out the procedure.
- 11-6-216 **Strippers:** Any vessel in which residual vinyl chloride is removed from polyvinyl chloride resin, except bulk resin, in the slurry form by the use of heat and/or vacuum. In the case of bulk resin, stripper includes any vessel which is used to remove residual vinyl chloride from polyvinyl chloride resin immediately following the polymerization step in the plant process flow.
- 11-6-217 **Type of Resin:** The broad classification of resin referring to the basic manufacturing process for producing that resin, including, but not limited to, the suspension, dispersion, latex, bulk and solution process.
- 11-6-218 **Vinyl Chloride Plant:** Any plant which produces vinyl chloride by any process.
- 11-6-219 **Vinyl Chloride Purification:** Any part of the process of vinyl chloride production which follows vinyl chloride formation and in which finished vinyl chloride is produced.
- 11-6-220 **Wastewater Treatment Process:** Any process which modifies characteristics such as BOD, COD, TSS, and pH, usually for the purpose of meeting effluent guidelines and standards; it does not include any process the purpose of which is to remove vinyl chloride from water to meet requirements of this rule.

- 11-6-300 **STANDARDS**

- 11-6-301 **Ethylene Dichloride Oxychlorination Reactor:** A person shall not discharge into the atmosphere from an oxychlorination reactor a gas stream with a concentration of vinyl chloride in excess of 0.20 g/kg (0.0002 lb/lb) of 100 percent ethylene dichloride produced.
- 11-6-302 **Ethylene Dichloride Purification:** A person shall not discharge into the atmosphere from any equipment at an ethylene dichloride purification plant a gas stream with a concentration of vinyl chloride in excess of 10 ppm. This requirement does not apply to equipment that has been opened, is out of operation and meets the requirements of Section 11-6-318.
- 11-6-303 **Vinyl Chloride Plants:** A person shall not discharge into the atmosphere from any equipment used in vinyl chloride formation and/or purification a gas stream with a concentration of vinyl chloride in excess of 10 ppm. This requirement does not apply to equipment that has been opened, is out of operation and meets the requirements of Section 11-6-318.
- 11-6-304 **Polyvinyl Chloride Reactors:** A person shall not discharge into the atmosphere from any reactor at a polyvinyl chloride plant a gas stream with a concentration of vinyl chloride in excess of 10 ppm. This requirement does not apply to a reactor that has been opened, is out of operation and meets the requirements of Section 11-6-318.
- 11-6-305 **Opening of a Polyvinyl Chloride Vessel:** The emissions of vinyl chloride from a reactor or stripper vessel when opened shall not be in excess of 0.02 g/kg (0.00002

lb/lb) of polyvinyl chloride product (on a dry basis). In the bulk process, the total product shall include the gross product of both prepolymerization and postpolymerization.

11-6-306 Polyvinyl Chloride Mixing, Weighting, and Holding: A person shall not discharge into the atmosphere from each mixing, weighing or holding container in vinyl chloride service which preceeds the stripper (or reactor if the plant has no stripper) a gas stream with a concentration of vinyl chloride in excess of 10 ppm.

11-6-307 Polyvinyl Chloride Monomer Recovery System: A person shall not discharge into the atmosphere from a monomer recovery system a gas stream with a concentration of vinyl chloride in excess of 10 ppm.

11-6-308 Polyvinyl Chloride Stripper: A person shall not discharge into the atmosphere from a polyvinyl chloride stripper a gas stream with a concentration of vinyl chloride in excess of 10 ppm.

11-6-309 Miscellaneous Sources Following a Polyvinyl Chloride Stripper: A person who operates a centrifuge, concentrator, blend tank, filter, dryer, conveyor air discharge, bagger, storage container, inprocess wastewater system or any other equipment following a stripper or a reactor where no stripper is used, in a polyvinyl chloride plant shall meet the requirements of either subsections 309.1 or 309.2 below:

309.1 For polyvinyl chloride plants using stripping technology to control vinyl chloride emissions, the weighted average residual vinyl chloride concentration in all grades of polyvinyl chloride resin processed through the stripping operation on each calendar day, measured immediately after the stripping operation is completed, shall not exceed the following limits:

Polyvinyl chloride dispersion resins excluding 2000 ppm latex resins

All other polyvinyl chloride resins, including 400 ppm latex resins, averaged separately for each type of resin.

309.2 For polyvinyl chloride plants controlling vinyl chloride emissions with technology other than stripping, or in addition to stripping, the emissions of vinyl chloride to the atmosphere shall not exceed the following limits:

Dispersion polyvinyl chloride resins excluding 2 g/kg/ (0.002 lb/lb) latex resins

of dry solid product from the stripper (or reactor if no stripper is used)

All other polyvinyl chloride resins, including 0.4 g/kg (0.0004 lb/lb) latex resins

of dry solid product from the stripper (or reactor if no stripper is used)

11-6-310 Relief Valve Discharge: Except for an emergency relief discharge, there will be no emissions to the atmosphere from any relief valve on any equipment in vinyl chloride service.

11-6-311 Loading and Unloading: After each loading or unloading operation and before the loading and unloading lines are opened to the atmosphere, the quality of vinyl chloride in all parts of the lines shall be reduced to 0.0038 m^3 (0.13 ft³) or less. Any vinyl chloride removed from the loading or unloading lines shall be ducted through a control device from which the concentration of vinyl chloride in the exhaust gases does not exceed 100 ppm.

11-6-312 Slip Gauges: During the loading or unloading of vinyl chloride, emissions from slip gauges in vinyl chloride service shall be ducted through a control device from which vinyl chloride emissions shall not exceed 10 ppm.

11-6-313 Rotating Pumps and Compressors: All rotating pumps and compressors in vinyl chloride service shall be sealless, or equipped with double mechanical seals. If double mechanical seals are utilized, the pressure between the two seals shall be

maintained so that any leak that occurs is onto the pump; or any leak between the two seals shall be ducted through a control device from which the exhaust gases do not contain vinyl chloride concentrations in excess of 10 ppm.

11-6-314 Reciprocating Pumps and Compressors: All reciprocating pumps and compressors in vinyl chloride service shall be equipped with double outboard seals and the pressure maintained between the two seals so that any leak that occurs is into the pump; or any leak between the two seals shall be ducted through a control device from which the exhaust gases do not contain vinyl chloride concentrations in excess of 10 ppm.

11-6-315 Agitators: All agitators in vinyl chloride service shall be equipped with double mechanical seals and the pressure between the two seals shall be maintained so that any leak that occurs between the two seals shall be ducted through a control device from which the exhaust gases do not contain vinyl chloride concentrations in excess of 10 ppm.

11-6-316 Leakage from Relief Valves: Each relief valve in vinyl chloride service shall be equipped with a rupture disk installed between the relief valve and the equipment; or the relief valve discharge shall be connected to a process line or a recovery system.

11-6-317 Manual Venting of Gases: Except in the case of emergency manual vent valve discharge, all gases which are manually vented from equipment in vinyl chloride service shall be ducted through a control device from which the exhaust gases do not contain vinyl chloride concentrations in excess of 10 ppm.

11-6-318 Opening of Equipment: Before opening any equipment in vinyl chloride service, except as set forth in 11-6-305, the quantity of vinyl chloride in the equipment shall not contain more than 2.0 percent by volume vinyl chloride or 0.0950 m³ (25 gal) of vinyl chloride, whichever is larger, at standard temperature and pressure. Any vinyl chloride remover pursuant to this section shall be ducted through a control device from which the concentrations of vinyl chloride in the exhaust gases does not exceed 10 ppm.

11-6-319 Samples: Unused portions of samples containing 10 percent or more by weight vinyl chloride shall be returned to the process. Sample containers in vinyl chloride service shall be purged into a closed process system.

11-6-320 Inprocess Wastewater: The concentration of vinyl chloride in each inprocess wastewater stream shall not exceed 10 ppm before being mixed with any other inprocess wastewater stream which contains less than 10 ppm vinyl chloride, before being exposed to the air, discharged to a wastewater treatment facility or discharged untreated as wastewater. This section does not apply to water used to wash out equipment after it has been opened to the atmosphere. Any vinyl chloride removed from the inprocess wastewater shall be ducted through a control device the exhaust gases from which do not contain concentrations of vinyl chloride in excess of 10 ppm.

11-6-400 ADMINISTRATIVE REQUIREMENTS

11-6-401 Emergency Emissions: Within 10 days of any emissions from a manual vent valve, the owner or operator of the source from which the emissions occurred shall submit to the APCO a report in writing containing information on the source, nature and cause of the emission: the date and time of the emission: the approximate amount of vinyl chloride emitted and the method used to determine the amount; the action taken to prevent the emission, and measures which will be adopted to prevent future emissions.

11-6-402 Semiannual Report: The owner or operator shall submit to the APCO within 180 days of the initial startup date, and semiannually thereafter on September 15 and March 15 of each year a report which includes the following information.

402.1 A record of any emissions which averaged over any hour period commencing on the hour which exceed the limits set forth in Sections 301,302,303, 304,305,306, 307,308,311,312,315,317,318, and 320 of this rule.

402.2 A record of the vinyl chloride content in the polyvinyl chloride resin.

402.3 A record of the emissions of each reactor when opened.

11-6-403 Testing: Unless a waiver of emission testing has been obtained from the APCO, a person shall test emissions from the plant within 90 days of start-up.

11-6-404 Prior Notification: The APCO shall be notified at least 30 days prior to an emission test, in order that the APCO have the option to conduct or observe the test.

11-6-405 Initial Start-Up: An owner or operator of any source to which this rule applies shall submit within 90 days of the initial startup date a written report notifying the APCO that Sections 11-6-311, 312, 318 and 320 are being implemented. The report shall contain the following information:

405.1 A list of equipment installed for compliance.

405.2 A description of the equipment.

405.3 A description of the method used to measure and/or calculate vinyl chloride emissions from the equipment.

405.4 A statement that the procedures are being used for each piece of equipment.

11-6-500 MONITORING AND RECORDS

11-6-501 Monitoring: A person subject to the requirements of Sections 11-6-302, 303, 305, 311, 312, 317, 318 and 320 shall install and maintain a continuous vinyl chloride emission monitoring system.

11-6-502 Records and Maintenance: All records obtained as a result of the requirements of this rule shall be maintained for a period of two years and made available for inspection by the APCO upon his request.

11-6-600 MANUAL OF PROCEDURES

11-6-601 Emission Monitoring, Source Testing, Analytical Procedures and Leak Detection: Emission monitoring source testing, analytical methods and leak detection shall be accomplished as set forth in the Manual of Procedures.

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 7
BENZENE**

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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 7
BENZENE
(Adopted March 6, 1985)

11-7-100 GENERAL

- 11-7-101 Description:** The purpose of this Rule is to limit the emissions of benzene from the following sources intended to operate in benzene service; pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, flanges and other product accumulator vessels, and control devices or systems required by this Rule.
- 11-7-110 Exemption, Small User:** The standards contained in this Rule shall not apply to sources at a plant site using or processing less than 1000 Mg (1101 tons) per year of benzene. However, the records required by Section 502.1.4 (a) must be maintained.
- 11-7-111 Exemption, Coke By-Product Plants:** The provisions of this Rule shall not apply to sources located in coke by-product plants.
- 11-7-112 Exemption, Vacuum Service:** The provisions of this Rule shall not apply to equipment in vacuum service, provided a list of equipment so designated is recorded by identification number and kept in a readily accessible location.

11-7-200 DEFINITION

- 11-7-201 Closed-Vent System:** A system that is not open to atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.
- 11-7-202 Connector:** Flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment.
- 11-7-203 Control Device:** An enclosed combustion device, vapor recovery system, or flare.
- 11-7-204 Double Block and Bleed System:** Two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.
- 11-7-205 Equipment:** Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange or other connector, product accumulator vessel in benzene service, and any control devices or systems required by this Rule.
- 11-7-206 First Attempt at Repair:** To take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.
- 11-7-207 In Benzene Service:** Any equipment which either contains or contacts a fluid (liquid or gas) that is at least 10 percent benzene by weight.
- 11-7-208 In Gas/Vapor Service:** Equipment which contains process fluid that is in the gaseous state at operating conditions.
- 11-7-209 In Liquid Service:** Equipment which contains process fluid in the liquid state under normal operating conditions.
- 11-7-210 In-Situ Sampling Systems:** Nonextractive samplers or in-line samplers.
- 11-7-211 In VOC Service:** The piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight and is not in liquid service.
- 11-7-212 In Vacuum Service:** Equipment which is operating at an internal pressure which is at least 5 kilopascals (kPa) (.73 psi) below ambient pressure.

- 11-7-213 **Leak:** A reading of 10,000 ppm on a portable hydrocarbon detector as approved by the APCO; or indication of liquid dripping from the equipment or an indication that a seal or barrier system has failed.
- 11-7-214 **Open-Ended Valve or Line:** Any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.
- 11-7-215 **Pressure Release:** The emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.
- 11-7-216 **Process Unit:** Equipment assembled to produce a benzene or its derivatives as intermediates or final products, or equipment assembled to use a benzene in the production of a product. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient product storage facilities.
- 11-7-217 **Process Unit Shutdown:** A work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.
- 11-7-218 **Product Accumulator Vessel:** Any distillate receiver, bottoms receiver, surge control vessel, or product separator in benzene service that is vented to atmosphere either directly or through a vacuum-producing system. A product accumulator vessel is in benzene service if the liquid or the vapor in the vessel is at least 10 percent by weight benzene.
- 11-7-219 **Repaired:** Equipment which is adjusted, or otherwise altered, to eliminate a leak.
- 11-7-220 **Semiannual:** A 6-month period; the first semiannual period concludes on the last day of the last month during the 180 days following initial startup for new sources; and the first semiannual period concludes on the last day of the last full month during the 180 days after the effective date of a specific section in which period is referenced.
- 11-7-221 **Sensor:** A device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

11-7-300 **STANDARDS**

- 11-7-301 **General:** All equipment subject to this Rule shall be marked in such a manner that it can be readily distinguished from other equipment.
- 11-7-302 **Pumps:** When a leak is detected from a pump a first attempt at repair shall be made not later than five calendar days after its detection. Each leak must be repaired as soon as practicable, but no later than fifteen calendar days after detection.
 - 302.1 Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the monthly monitoring requirements if the dual seal system is operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or, is equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of 11-7-311; or, is equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere and, the barrier fluid is not in benzene service and not in VOC service if subject to other Regulation 8 rules or 40 CFR 60; and, each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system or both; and each pump is visually inspected each calendar week for indications of liquids dripping from the pump seal, and, each sensor as described above is checked daily or is equipped with an audible alarm and, the owner or

operator determines based on design considerations and operating experience a criterion that indicates failure of the seal system, the barrier system or both and, failure of the system as indicated by the sensor shall indicate a leak.

302.2 Any pump emitting less than 500 ppm is exempt from the requirements of monthly monitoring and the weekly visual inspection if: the pump has no externally actuated shaft penetrating the pump housing; and, the pump is tested for compliance with the 500 ppm limit upon initial start-up, annually, and at any other times when requested by the APCO.

2.1 Any pump equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with Section 311 is exempt from the requirements of monthly monitoring and weekly visual inspection.

2.2 Any pump located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement or the daily sensor check provided that each pump or sensor is visually inspected as often as practicable and at least monthly.

(Amended May 15, 1985)

11-7-303 **Compressors:** When a leak is detected from a compressor a first attempt at repair shall be made no later than five (5) calendar days after detection. Each leak shall be repaired as soon as practicable but no later than fifteen calendar days from the date of detection.

303.1 Each compressor in benzene service shall be equipped with a seal system that includes a barrier fluid system that prevents leakage of process fluid into the atmosphere and the seal system shall be operated with the barrier fluid at a greater pressure than the compressor stuffing box; or, equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with 311; or, equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere. The barrier fluid shall not be in benzene service and if the compressor is covered by rules contained in Regulation 8, shall not be in VOC service. Each barrier fluid system described in this Section shall be equipped with a sensor that will detect failure of the seal system barrier fluid system or both; each sensor shall be checked daily or shall be equipped with a audible alarm; and the owner or operator shall determine based on design considerations and operating experience a criterion that indicates failure of the seal system, the barrier fluid system or both. Such failure will indicate a leak.

303.2 A compressor is exempt from the requirement of 303.1 if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device which complies with Section 311.

303.3 Any compressor emitting less than 500 ppm is exempt from the requirements of Section 303.1 provided: It is demonstrated that the compressor is operating at less than 500 ppm above background; and, the compressor is tested for compliance with the 500 ppm emission limit initially upon start-up, annually and at other times as requested by the APCO.

(Amended May 15, 1985)

11-7-304 **Pressure Relief Devices in Gas/Vapor Service:** Except during pressure releases, emissions from any pressure relief device in gas/vapor service shall not exceed 500 ppm above background.

304.1 No later than five (5) calendar days after a pressure release no emissions from a pressure relief device shall exceed 500 ppm above background.

304.2 A pressure relief device which is equipped with a closed vent system capable of capturing and transporting any leakage from the pressure relief device to a control device is exempt from Section 304.

11-7-305 Sampling Connecting System: Any sampling connecting system shall be equipped with a closed purge system or closed vent system which complies with Section 311.

Returns the purged process fluid directly to the process line with zero benzene emissions into the atmosphere; or,

Collects and recycles the purged process fluid with zero benzene emissions into the atmosphere; or,

Is designed and operated to capture and transport all the purged process fluid to a control device which complies with Section 311.

305.1 In-situ sampling systems are exempt from the requirements of Section 305.

11-7-306 Open-Ended Valves: Open-ended valves or lines shall be equipped with a cap, blind flange, plug, or a second valve which shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

306.1 Any open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

306.2 When a double block and bleed system is used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Sections 306 and 306.1 at all other times.

11-7-307 Valves: When a leak is detected from a valve a first attempt at repair shall be made not later than five (5) days from the date of detection. Each leak shall be repaired as soon as practicable, but no later than fifteen (15) calendar days from the date of detection.

307.1 Any valve for which a leak is not detected for two (2) consecutive months may be monitored the first month or every quarter, beginning with the next quarter. When a leak is detected the valve shall be monitored monthly until a leak is not detected for two (2) successive months.

307.2 A first attempt to repair as specified in Section 307 above shall include but is not limited to the following best practices where practicable:

- (a) Tightening of bonnet bolts
- (b) Replacement of bonnet bolts
- (c) Tightening of packing gland nuts
- (d) Injection of lubricants into lubricated packing

307.3 Any valve emitting less than 500 ppm above background which has been designated as no detectable emissions is exempt from the provisions of Section 307 if:

The valve has no external actuating mechanism in contact with the process fluid; and

The valve is tested initially upon designation; annually, and at other times as requested by the APCO.

307.4 Any valve designated as an unsafe-to-monitor valve is exempt from the monthly monitoring requirements if:

The owner or operator demonstrates to the satisfaction of the APCO that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with those requirements; and,

The owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as is practicable, during safe-to-monitor times.

307.5 Any valve designated as a difficult to monitor valve is exempt from the monthly monitoring requirements if:

The owner or operator of the valve demonstrates to the satisfaction of the APCO that the valve cannot be monitored without elevating the monitoring personnel more than two (2) meters above a support surface; and
The process unit within which the valve is located is an existing process unit; and

The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once a year. (Amended May 15, 1985)

11-7-308 Pressure Relief Devices in Liquid Service, Flanges and Other Connectors: Pressure relief devices in liquid service, flanges and other connectors shall be monitored within five (5) calendar days after evidence of a potential leak is found by visual, audible, olfactory, or other detection methods.

308.1 When a leak is detected, a first attempt to repair it shall be made no later than five (5) calendar days after detection. First attempts at repair are defined in Section 307.2 above.

308.2 When a leak is detected it shall be repaired as soon as is practicable but not later than fifteen (15) calendar days after detection.

(Amended May 15, 1985)

11-7-309 Product Accumulator Vessels: Each product accumulator vessel shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel to a control device.

11-7-310 Delay of Repair: Repair of equipment from which leaks have been detected may be delayed if the repair is technically infeasible without the shut-down of a process unit and the equipment is repaired before the end of the next process unit shut-down.

310.1 Repair of equipment from which leaks have been detected may be delayed if the equipment is isolated from the process and does not remain in benzene service.

310.2 Repair of valves may be delayed if the owner or operator demonstrates to the satisfaction of the APCO that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and, when repairs are made, the purged material is collected and destroyed, or recovered in a control device which complies with Section 311.

310.3 Repair of a valve may be delayed beyond a process unit shutdown if the valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted and valve assembly supplies have been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than six (6) months after the first process unit shutdown.

310.4 Repair of pumps may be delayed if repair requires the use of a dual mechanical seal system that includes a barrier fluid system and repair is completed as soon as practicable; but not later than six (6) months after the leak is detected.

11-7-311 Closed Vent Systems and Control Devices: Vapor recovery systems shall have a recovery efficiency of 95 percent or greater.

311.1 Enclosed combustion devices shall have a minimum destruction efficiency of 95 percent or greater for benzene; or shall be designed to provide a residence time of at least 0.50 seconds at a minimum temperature of 760°C (1400°F).

311.2 Flares used as a control device for benzene emissions shall be steam-assisted, air-assisted or non-assisted and shall meet the following requirements:

- (1) Be designed for and operated with no visible emissions except for a period not to exceed three (3) minutes during any one (1) hour.
- (2) Be operated with a flame present at all times.
- (3) Be used only with a combustion gas containing a net heating value of 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam assisted or air assisted; or with a net heating value of 7.45 MJ/scm or greater if the flare is nonassisted.
- (4) Steam assisted and air assisted shall be designed for and operated with an exit velocity of less than 18 m/sec (60 ft/sec).
- (5) Air assisted flares shall be designed and operated with an exit velocity less than velocity, VMAX, as determined by 40 CFR Part 61.

311.3 Closed Vent Systems: No emissions from any closed vent system shall exceed 500 ppm. These systems shall be monitored initially upon startup, annually, and at other times as requested by the APCO.

3.1 A first attempt at repairs shall be made no later than five (5) calendar days after detection of a leak which results in any emissions which exceed 500 ppm.

3.2 Leaks resulting in any emissions which exceed 500 ppm shall be repaired as soon as practicable but not later than fifteen (15) calendar days after detection.

3.3 Closed vent systems and control devices used to comply with this Rule shall be maintained and operated in conformance with their design specifications at all times when emissions are vented to them.

(Amended May 15, 1985)

11-7-312 Alternative Standards for Valves in Benzene Service: Allowable percentage of valves leaking. An owner or operator may elect to have all valves within a process unit comply with an allowable percentage of valves leaking equal to or less than 2.0 percent provided the following requirements are met:

312.1 The owner or operator notifies the APCO that the owner or operator has elected to meet the alternate standard as provided for in Section 312; such notification to be made ninety (90) days prior to implementing the standard.

312.2 All valves in benzene service within a process unit shall be monitored initially upon designation, annually, and at other times as requested by the APCO. The monitoring of all valves within the process shall be completed within one week, and the leak percentage shall be determined by dividing the number of valves in benzene service for which leaks are detected by the number of valves in benzene service in the process unit.

312.3 A leak from any valve shall be repaired pursuant to Section 307.

312.4 An owner or operator who elects to have all valves within a process unit comply with the alternative standard contained in Section 312 shall not operate a process unit with a valve leak rate greater than 2.0 percent of the valves contained in that process unit.

312.5 If an owner or operator elects to no longer comply with the alternative standard provided for in Section 312, the owner or operator shall notify the APCO that compliance will be achieved by meeting the requirements of Section 307.

(Amended May 15, 1985)

11-7-313 Alternative Standard For Valves In Benzene Service-Skip Period Leak Detection and Repair: An owner or operator may elect to comply with the alternative standard listed below for all valves within a process unit provided the APCO is notified ninety (90) days prior to the implementation of such a standard.

313.1 An owner or operator shall comply initially with the provisions of Section 307.

313.2 After two (2) consecutive quarterly leak detection periods with the valves leaking equal to or less than 2.0 percent an owner or operator may skip one (1) of the quarterly leak detection periods for valves in benzene service.

313.3 After five (5) consecutive quarterly leak detection periods with the valves leaking equal to or less than 2.0 percent, an owner or operator may skip

three (3) of the quarterly leak detection periods for valves in benzene service.

- 313.4 If, during any of the above inspections, the percentage of valves leaking is found to exceed 2.0 percent, an owner or operator shall comply with the requirements of Section 307.

(Amended May 15, 1985)

- 11-7-314 **Alternative Means of Emission Limitation:** Permission may be granted by the APCO to use an alternative control plan to comply with the provisions of this Rule subject to the following conditions:

314.1 Where the standard is an equipment design or operational requirement each owner or operator must apply to the APCO for permission to use an alternative control plan and must collect and verify test data to justify the plan. The APCO will compare test data for the means of emission limitation to test data for the equipment design and operational requirements and may condition the permission on requirements which he deems necessary to assure operation and maintenance which will achieve the same emission reduction as the equipment, design and operational requirements.

314.2 Where the standard is a work practice the following requirements must be met.

(1) Each owner or operator applying to the APCO for permission to use an alternative means of emission reduction shall collect and verify the necessary test data to establish the equivalency of the alternative method of emission reduction.

(2) For each source for which permission is requested, the emission reduction achieved by the work practice shall be demonstrated for a period of at least twelve months.

(3) Each owner or operator applying for permission to use an alternative plan shall commit in writing each source to work practices which provide for emission reduction equal to or greater than the emission reductions achieved by the required work practices.

(4) In considering the APCO will compare the demonstrated emission reduction from the alternative means of emission limitation to the demonstrated emission reduction for the required work practices.

(5) The APCO may condition the permission to utilize an alternative means of emission limitation on requirements that may be necessary to assure operation and maintenance necessary to achieve the same emission reduction as the required work practices of this Rule.

314.3 An owner or operator may offer a unique or innovative approach to demonstrate the alternative means of emission limitation.

314.4 Manufacturers of equipment used to control equipment leaks of benzene may apply to the APCO for permission for an alternative means of emission limitation which achieves a reduction in emissions of benzene achieved by the equipment, design and operational requirements of this Rule.

11-7-400 **ADMINISTRATIVE REQUIREMENTS**

- 11-7-401 **Inspection:** An owner or operator shall visually inspect each calendar week all pumps subject to this Rule for indications of liquid dripping from the seal. Pumps which have been designated by the owner or operator for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and any pump equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device which complies with Section 311 are exempt from this requirement. (Amended May 15, 1985)

11-7-402 Initial Report: Within 90 days of adoption for an existing source or within 90 days of startup of a new source an owner or operator shall state that the provisions of this Rule are being implemented including the following information on each source:

- (a) Equipment identification number and process unit identification number.
- (b) Type of equipment (pump, valve, etc.)
- (c) Percent by weight benzene in the fluid.
- (d) Process fluid state at the equipment (gas/vapor or liquid).
- (e) Method of compliance.

(Amended May 15, 1985)

11-7-403 Reporting: A report shall be submitted to the APCO semiannually starting 6 months after the initial report required in Section 402 above that includes the following information:

- (a) Process unit identification
- (b) For each month during the semiannual reporting period:
Number of valves for which leaks were detected as described in Sections 307 and 313.

Number of valves for which leaks were not repaired as required in Section 307.

Number of pumps for which leaks were detected.

Number of pumps for which leaks were not repaired as required in Section 302.

Number of compressors for which leaks were detected.

Number of compressors for which leaks were not repaired as required in Section 303.

The facts that explain any delay of repairs and where appropriate, why a process unit shutdown was technically infeasible.

- (c) Dates of process unit shutdowns which occurred within the semiannual reporting period.

- (d) Revisions to items reported according to paragraph Section 402 if changes have occurred since the initial report or subsequent revisions to the initial report.

- (e) The results of all performance tests to determine compliance with Sections 302.2, 303.3, 307.3, 311.3, 312.3, and 313 conducted within the semiannual reporting period.

- (f) In the first report submitted as required in Section 402 the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule, unless a revised schedule has been submitted in a previous semiannual report.

(Amended May 15, 1985)

11-7-500 MONITORING AND RECORDS

11-7-501 Monitoring: An owner or operator shall monitor monthly all valves and pumps subject to this Rule. Valves and pumps which have been designated by the owner or operator for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background are exempt from this requirement.

11-7-502 Records:

502.1 An owner or operator subject to this Rule shall comply with the following recordkeeping requirements. Records of more than one process unit may be kept in a single recordkeeping system providing each record identifies the process unit.

1.1 When a leak is detected as specified in Sections 302, 303, 307, and 308, the following requirements apply:

- (a) A weatherproof and readily visible identification, marked with the equipment identification number shall be attached to the leaking equipment.

(b) The identification on the valve may be removed after it has been repaired; and after it has been monitored for two successive months as specified in Section 307.1 during which no leak has been detected.

1.2 When a leak is detected as specified in Sections 302, 303, 307, and 308, the following information shall be recorded in a log and shall be kept for two (2) years in a readily accessible location.

(a) The instrument and operator identification number and the equipment identification numbers.

(b) The date the leak was detected and the dates of each attempt to repair the leak.

(c) Repair methods applied in each attempt to repair the leak.

(d) Above 10,000 ppm if the maximum instrument reading measured with an approved combustible gas meter after repair attempt is greater than 10,000 ppm.

(e) Repair delayed and the reason for the delay if a leak is not repaired within 15 calendar days after the discovery of the leak.

(f) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(g) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.

(h) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(i) The date of successful repair of the leak.

1.3 The following information pertaining to the design requirements for closed-vent systems and control devices described in Section 311 shall be recorded and kept in a readily accessible location:

(a) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(b) The dates and descriptions of any changes in the design specifications.

(c) A description of the parameter or parameters monitored, as required in Section 311 to ensure that control devices are operated and maintained in conformance with their design and an explanation of why the parameter (or parameters) was selected for the monitoring.

(d) Periods when the closed-vent systems and control devices required in Sections 302, 303, 304, 305, and 309 are not operated as designed, including periods when a flare pilot light does not have a flame.

(e) Dates of startups and shutdowns of the closed-vent systems and control devices required in Sections 302, 303, 304, 305, and 309.

1.4 The following information pertaining to all equipment subject to the requirements in Sections 302 to 314 shall be recorded in a log that is kept in a readily accessible location:

(a) A list of identification numbers for equipment subject to the requirements of this Rule.

(b) A list of identification numbers for equipment signed by the owner or operator he elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 302, 303 and 307.

(c) A list of equipment identification numbers for pressure relief devices required to comply with Section 304.1.

(d) The dates of each compliance test required in Sections 302.2, 303.3, 304.1, and 307.3.

(e) The background level measured during each compliance test in item (d).

(f) The maximum instrument reading measured at the equipment during each compliance test in item (d).

(g) A list of identification numbers for equipment in vacuum service.

1.5 The following information pertaining to all valves subject to the requirements of Sections 307.4 and 307.5 shall be recorded in a log that is kept in a readily accessible location:

(a) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.

(b) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

(c) The following information shall be recorded for valves complying with Section 313.

A schedule of monitoring and;

The percent of valves found leaking during each monitoring period.

(d) The following information shall be recorded in a log that is kept in a readily accessible location:

Design criterion required in Sections 302.1 and 303.1 and an explanation of the design criterion; and

Any changes to this criterion and the reasons for the changes.

(e) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicable section of this Rule.

An analysis demonstrating the design capacity of the process unit, and an analysis demonstrating that equipment is not in benzene service. Information and data used to demonstrate that a piece of equipment is not in benzene service shall be recorded in a log that is kept in a readily accessible location.

(Amended May 15, 1985)

11-7-600 MANUAL OF PROCEDURES

11-7-601 Measurement for Benzene: Monitoring and compliance determination required by this Rule shall be conducted as set forth in 40 CFR 61 and the Manual of Procedures.

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 8

**HEXAVALENT CHROMIUM AIRBORNE TOXIC CONTROL MEASURE FOR
CHROME PLATING AND CHROMIC ACID ANODIZING OPERATIONS**

(Adopted July 20, 1988)

The provisions of Section 93102, Subchapter 7.5, Chapter 1, Division 3, Title 17, of the California Code of Regulations: "Hexavalent Chromium Airborne Toxic Control Measure For Chrome Plating And Chromic Acid Anodizing Operations" are made part of the Rules and Regulations of the Bay Area Air Quality Management District. Whenever any source is subject to more than one rule, regulation, provision, or requirement relating to the control of any air contaminant, in cases of conflict or duplication, the most stringent rule, regulation, provision, or requirement shall apply.

(Deleted and re-adopted, November 4, 1998)

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 9
ETHYLENE OXIDE STERILIZERS**

(Adopted November 1, 1989)

The provisions of Sections 93108 and 93108.5, Title 17, of the California Code of Regulations: "Ethylene Oxide ATCM for Sterilizers and Aerators, Parts 1 and 2" are made part of the Rules and Regulations of the Bay Area Air Quality Management District. Whenever any source is subject to more than one rule, regulation, provision, or requirement relating to the control of any air contaminant, in cases of conflict or duplication, the most stringent rule, regulation, provision, or requirement shall apply.

(Amended 8/1/90; 5/6/92; Deleted and Re-adopted 5/17/00)

PART 1

NON COMMERCIAL STERILIZERS AND AERATORS AND COMMERCIAL STERILIZERS AND AERATORS USING LESS THAN 2,000 POUNDS OF ETHYLENE OXIDE PER 12 CONSECUTIVE MONTHS

(a) Definitions. For the purposes of this section, the following definitions shall apply:

- (1) “Acute care facility” means any facility currently licensed by the California Department of Health Services as a general acute care hospital (as defined in 22, California Code of Regulations, section 70005), or any military hospital.
- (2) “Aeration” is the process during which residual ethylene oxide dissipates, whether under forced air flow, natural or mechanically assisted convection, or other means, from previously sterilized materials after the sterilizer cycle is complete.
- (3) “Aeration-only facility” means a facility which performs aeration on materials which have been sterilized with ethylene oxide at another facility.
- (4) “Aerator” means any equipment or space in which materials previously sterilized with ethylene oxide are placed or remain for the purpose of aeration. An aerator is not any equipment or space in which materials which have previously undergone ethylene oxide sterilization and aeration can be handled, stored, and transported in the same manner as similar materials that have not been sterilized with ethylene oxide.
- (5) “Aerator exhaust stream” means all ethylene-oxide contaminated air which is emitted from an aerator.
- (6) “Back-draft valve exhaust stream” is the air stream which results from collection of ethylene oxide-contaminated air which may be removed from the sterilizer through a back-draft valve or rear chamber exhaust system during unloading of the sterilized materials.
- (7) “Commercial sterilizer” means facility which as its principal business sterilizes products or equipment manufactured elsewhere, or a facility which sterilizes products or equipment it manufactures. A commercial sterilizer is also a non-medical facility that sterilizes items used in conducting its business.
- (8) “Control device” means an article, machine, equipment, or contrivance which reduces the amount of ethylene oxide between its inlet and outlet and which is sized, installed, operated, and maintained according to good engineering practices, as determined by the district.

- (9) "Control efficiency" is the ethylene oxide (EtO) mass or concentration reduction efficiency of a control device, as measured with ARB Test method 431 (Title 17, CCR, section 94143) according to the source testing requirements herein, and expressed as a percentage calculated across the control device as follows
- (10) "District" means the local air pollution control district or air quality management district.
- (11) "Ethylene oxide (EtO)" is the substance identified as a toxic air contaminant by the Air Resources Board in 17 CCR, section 93000.
- (12) "Facility" means any entity or entities which own or operate a sterilizer or aerator, are owned or operated by the same person or persons, and are located on the same parcel or contiguous parcels of land.
- (13) "Facility-wide pounds of ethylene oxide used per year" is the total pounds of ethylene oxide used in all of the sterilizers at the facility during a one-year period.
- (14) "Leak-free" refers to that state which exists when the concentration of sterilant gas measured 1 cm. away from any portion of the exhaust system of a sterilizer or aerator, during conditions of maximum sterilant gas mass flow, is less than"
- (A) 30 ppm for sterilant gas composed of 12% ethylene oxide/88% chlorofluorocarbon-12 by weight; and
- (B) 10 ppm for other compositions of sterilant gas as determined by ARB Test Method 21 (Title 17, CCR, section 94124) using a portable flame ionization detector or a non-dispersive infrared analyzer, calibrated with methane, or an acceptable alternative method or analytical instrument approved by the district. A chlorofluorocarbon-12 specific audible detector using a metal oxide semi-conductor sensor shall be considered an acceptable alternative for exhaust systems carrying a sterilant gas mixture of ethylene oxide and chlorofluorocarbon-12.
- (15) "Local medical emergency" means an unexpected occurrence in the area served by the acute care facility resulting in a sudden increase in the amount of medical treatments which require a significant increase in the operation of a sterilizer or aerator.
- (16) "Non-commercial sterilizer" means a facility other than a commercial facility at which ethylene oxide is used for sterilizing or fumigation, or at which aeration occurs.
- (17) "Sterilant gas" means ethylene oxide or any combination of ethylene oxide and (an) other gas(es) used in a sterilizer.
- (18) "Sterilizer" means any equipment in which ethylene oxide is used as a biocide to destroy bacteria, viruses, fungi, and other unwanted organisms on materials. Equipment in which ethylene oxide is used to fumigate foodstuffs is considered a sterilizer.

- (19) "Sterilizer cycle" means the process which begins when ethylene oxide is introduced into the sterilizer, includes the initial purge or evacuation after sterilization, and subsequent air, steam or other washes, and ends after evacuation of the final wash.
- (20) "Sterilizer door hood exhaust stream" is the air stream which results from collection of fugitive ethylene oxide emissions, by means of an existing hood over the sterilizer door, during the time that the sterilizer door is open after the sterilizer cycle has been completed.
- (21) "Sterilizer exhaust stream" is all ethylene oxide-contaminated air which is intentionally removed from the sterilizer during the sterilizer cycle.
- (22) "Sterilizer exhaust vacuum pump" means a device used to evacuate the sterilant gas during the sterilizer cycle, including any associated heat exchanger. A sterilizer exhaust vacuum pump is not a device used solely to evacuate a sterilizer prior to the introduction of ethylene oxide.
- (b) Applicability. Any person who owns or operates a non-commercial sterilizer or aerator or any person who owns or operates a commercial sterilizer or aerator that uses less than 2,000 pounds of EtO per consecutive 12-month period after December 6, 1996, must comply with Part I of this regulation, section 93108.
- (c) Notification. Any person subject to this regulation must provide the district with the following information, in writing, within 30 days of the date of district adoption:
- (1) The name(s) of the owner and operator of the facility, and
 - (2) The location of the facility, and
 - (3) The number of sterilizers and aerators at the facility, and
 - (4) An estimate of the total pounds of ethylene oxide and sterilant gas used by the facility, in all sterilizers, during the previous calendar year, as determined by a method approved by the district.

A district may exempt a source from this requirement if the district maintains current equivalent information.

- (d) Reporting. Any person who owns or operates a sterilizer shall furnish a written report to the district annually on the date specified by the district, or, at the district's discretion, shall maintain such a report and make it available to the district upon request. Commercial sterilizers shall maintain copies of these reports on site for 5 years. This report shall include one of the following, as determined by the district:

- (1) The number of sterilizer cycles and the pounds of ethylene oxide used per cycle for each sterilizer during the reporting period, as determined by a method approved by the district; or
 - (2) The total pounds of sterilant gas and the total pounds of ethylene oxide purchased, used, and returned in the previous calendar year, as determined by a method approved by the district.
- (e) Requirements. No person shall operate a sterilizer or aerator unless all of the following requirements are satisfied:
- (1) The exhaust systems and EtO supply system including, but not limited to, any piping, ducting, fittings, valves, or flanges, through which ethylene oxide-contaminated air is conveyed between the sterilizer, aerator and the control device shall be leak-free; and
 - (2) All of the control requirements shown in Table I below for the applicable control category are met; and
 - (3) The average concentration of ethylene oxide shall not exceed:
 - (A) 30 µg/ml in any liquid discharge associated with the sterilization cycle; and
 - (B) 10 µg/ml in any liquid discharge associated with the aeration cycle for those facilities where Table I requires aeration control;
 - (4) For facilities using more than 600 pounds of ethylene oxide per year, the back-draft valve is ducted to the control device used to control the sterilizer exhaust stream or the aerator exhaust stream; and
 - (5) For facilities using more than 5,000 pounds of ethylene oxide per year, the sterilizer door hood exhaust stream is ducted to the control device used to control the aerator exhaust stream.

Table I
Control and Compliance Requirements

Control Category (Facility-wide Pounds of Ethylene Oxide Used Annually)	REQUIREMENTS		
	(a) Exhaust Streams to be Controlled	(b) Exhaust Streams to be Tested	(c) Control Efficiency (%)
Less than or equal to 25	None	None	None
More than 25 and less than or equal to 600	Sterilizer	Sterilizer	99.0
More than 600 and less than or equal to 5,000	Sterilizer	Sterilizer	99.9
	Aerator	Aerator	95.0
	Sterilizer/Aerator	Sterilizer/Aerator	99.7
	Back-draft Valve		N/A*
More than 5,000	Sterilizer		99.9
	Aerator		99.0
	Sterilizer door hood & Back-draft Valve		N/A*
			N/A*
Aeration-Only Facilities	Aerator	Aerator	95.0
* Not Applicable			

(f) Exemptions.

- (1) The requirements set forth in subsection (e) above do not apply to any facility which treats materials in a sterilizer and which uses a total of 25 pounds or less of ethylene oxide per calendar year.
- (2) The district hearing board may grant an emergency variance from items (a) and (c) in Table I of Part 1 subsection (e), Requirements, to a person who owns or operates an acute care facility if response to a local medical emergency requires increased operation of a sterilizer or aerator such that the requirements cannot be met.

The demonstrated need for such increased operation shall constitute "good cause" pursuant to Health and Safety Code Section 42359.5. The emergency variance shall be granted in accordance with this section and any applicable district rule regarding the issuance of emergency variances for such occurrences, including the

requirement that the emergency variance shall not remain in effect longer than 30 days; however, the emergency variance shall be granted only for the period of time during which increased operation of a sterilizer or aerator is necessary to respond to the local medical emergency.

- (g) Compliance. For the purpose of determining compliance with the control efficiency requirement set forth in column (c) of Table I, subsection (e), if a reduction in the amount of ethylene oxide across the control device is demonstrated, but the control efficiency cannot affirmatively be demonstrated because the concentration of ethylene oxide measured in the outlet of the device is below 0.2 parts per million ethylene oxide, the facility shall be considered to be in compliance with this regulation.
- (h) Source Testing. Source testing shall be conducted according to ARB Test Method 431 (Title 17, CCR, section 94143) and the method evaluations cited therein or an acceptable source test method approved by the district with the concurrence of the Executive Officer of the Air Resources Board. Specific requirements for application are given below:
 - (1) All ethylene oxide emission points shall be sampled during the entire testing period.
 - (2) If the efficiency is being determined by inlet and outlet sampling, the inlet and outlet of the control device shall be sampled simultaneously during testing.
 - (3) The efficiency of each control device shall be determined under conditions of maximum ethylene oxide mass flow to the device, under normal operating conditions. To measure the control efficiency of the control device on the sterilizer exhaust stream, sampling shall be done during the entire duration of the first sterilizer evacuation after ethylene oxide has been introduced. To measure the control efficiency of the control device on an aerator exhaust stream with a constant air flow, sampling shall be done during a period of at least 60 minutes, starting 15 minutes after aeration begins. To measure the control efficiency of the control device on an aerator device stream with a non-constant air flow, sampling shall be done during the entire duration of the first aerator evacuation after aeration begins.
 - (4) There shall be dilution of the air stream between the inlet and the outlet test points during testing.

NOTE: Authority cited: Sections 39600, 39650, 39660, and 39666, Health and Safety Code.
Reference: Sections 39650, 39665, and 39666, Health and Safety Code, and 40 CFR, Part 63 Subpart O.

PART 2

COMMERCIAL STERILIZERS AND AERATORS USING 2,000 POUNDS OR MORE OF ETHYLENE OXIDE PER 12 CONSECUTIVE MONTHS

- (a) Definitions. For the purposes of this section, the definitions set forth in section 93108(a) shall apply unless otherwise specified below:
- (1) “Administrator” means the Administrator of the United States Environmental Protection Agency (or the implementing agency in accordance with any delegation of authority to approve alternatives from the U.S. Environmental Protection Agency).
 - (2) “Back-draft valve/chamber exhaust stream” is the air stream which results from collection of ethylene oxide-contaminated air which may be removed from the sterilizer through a back-draft valve or rear chamber exhaust system during unloading of the sterilized materials.
 - (3) “Baseline temperature” means the range of temperatures at the outlet point of a catalytic oxidation control device or at the exhaust point from the combustion chamber for a thermal oxidation control device established during the performance test at which the unit achieves at least 99 percent control of ethylene oxide emissions.
 - (4) “Manifolding emissions” means combining ethylene oxide emissions from two or more vent types for the purposes of controlling these emissions with a single control device.
 - (5) “Maximum ethylene glycol concentration” means the concentration of ethylene glycol in the scrubber liquor of an acid-water scrubber control device
 - (6) “Maximum liquor tank level” means the level of scrubber liquor in the acid-water scrubber liquor recirculation tank established during a performance test when the scrubber achieves at least 99 percent control of ethylene oxide emissions.
 - (7) “Modifications” means either
 - (A) any physical change in, method of operation of, or addition to, an existing permit unit that requires an application for a permit to construct and/or operate. Routine maintenance and/or repair shall not be considered a physical change. A change in the method of operation of equipment unless previously limited by an enforceable permit condition, shall not include:
 - (i) an increase in the production rate, unless such increases will cause the maximum design capacity of the equipment to be exceeded; or

- (ii) an increase in the hours of operation; or
 - (iii) a change in the ownership or a source; or
 - (B) The addition of any new permit unit at an existing sources; or
 - (C) The replacement of components if the fixed capital cost of the components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source.
- (8) "Oxidation temperature" means the temperature at the outlet point of a catalytic oxidation device or at the exhaust point from the combustion chamber for a thermal oxidation device.
- (9) "Parametric monitoring" means monitoring of a specific operating parameter or parameters of a control device established to demonstrate that the control device is operating under conditions that meet a performance standard.
- (b) **Applicability.** Any person who owns or operates a commercial sterilizer or an aerator using 2,000 pounds or more of ethylene oxide in any 12 consecutive month period after December 6, 1996 must comply with Part 2 of this regulation, section 93108.5, effective the date that the National Emission Standard for Hazardous Air pollutants for Ethylene Oxide Commercial Sterilization and Fumigation Operations (Code of Federal Regulations 40, Part 63, subpart O) becomes effective. Until that time the requirements in Part I, section 93108, are applicable to all sterilizers and aerators.
- (c) **Initial Notification.** Any person subject to this regulation must provide the district with the following information, in writing, within 30 days after the source becomes subject to the regulation. Facilities must also provide the information to the Administrator unless the Administrator has waived this requirement.
- (1) The name(s) and address of the owner and operator of the facility;
 - (2) The location of the facility;
 - (3) The number of sterilizers and aerators at the facility;
 - (4) An estimate of the facility-wide pounds of ethylene oxide used per year;
 - (5) A brief description of the nature, size, design, design operating capacity, expected control efficiency, and method of operation of the source, and control equipment, including operating design capacity, bypass valves, and an identification of each point of emission.
 - (6) Facilities complying with this regulation with a control technology other than acid-water scrubbers or catalytic or thermal oxidizers must provide information describing the design and operation of the air pollution control system including recommendations for the operating parameters to be monitored that will indicate proper operation and maintenance. The site specific operating, reporting and monitoring parameters will be determined during the performance test.

- (7) A statement of whether the source is a major or area source to the Administrator. If the source is a new major source or a major source undergoing modification, it must received written approval in advance from the Administrator. The source may use the "Application for Construction or Modification" in Appendix 2 to satisfy the initial notification requirements; and
 - (8) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date.
- (d) Requirements. No person subjected to these standards shall operate a sterilizer or aerator, unless all of the following requirements are satisfied:
- (1) All ethylene oxide released from the sterilizer and aerator shall be controlled to meet the requirements shown in Table I for the applicable control category;
 - (2) The exhaust systems and EtO supply including, but not limited to, and piping, ducting, fitting, valves, or flanges, through which ethylene oxide is conveyed to and from the sterilizer, aerator and the control device shall be leak-free; and
 - (3) Facilities must obtain a Title V permit from the Administrator.
- (e) Compliance Procedures
- (1) Compliance Testing Notification: The facility shall notify the Administrator 60 days before the date and time of any performance tests and monitoring system evaluations. In the event the source is unable to conduct the test on the date specified in the notification, the source shall notify the Administrator within 5 days prior to the scheduled performance test date.
 - (2) Compliance Testing
 - (A) Source testing conducted for the purpose of demonstrating compliance must be according to ARB Test Method 431 (Title 17, CCR, section 94143) and the method evaluations cited therein or an acceptable source test method approved by the district with the concurrence of the Executive Officer of the Air Resources Board, and the Administrator. Before conducting a required source test, the source shall develop a site-specific test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance program.

Table 1
Emission Standards for Commercial Facilities

CONTROL CATEGORY (FACILITY- WIDE POUNDS OF ETHYLENE OXIDE USED PER 12 CONSECUTIVE MONTHS)	REQUIREMENTS FOR ETHYLENE OXIDE STERILIZER FACILITIES		
	(a) Emission Streams to be Controlled	(b) Emissions Streams to be Tested	(c) Control Efficiency (%) or Outlet Concentration
equal to or greater than 2,000 and less than 5,000	Sterilizer Aerator Back-draft valve Aeration Only	Sterilizer Aerator	99.9 95.0 * 95.0
equal to or greater than 5,000 and less than 20,000	Sterilizer Aerator Sterilizer Door Hood & Back-draft Valves Aeration Only	Sterilizer Aerator	99.9 99.0 * * 95.0
equal to or more than 20,000	Sterilizer Aerator Sterilizer Door Hood Back-draft Valves Aeration Only	Sterilizer Aerator	99.9 99.0 or 1 ppm max * 99.0* 99.0

* Sources may show compliance by manifolding emissions to control device used to comply with sterilizer or aerator requirement.

- (B) The following procedures shall be used to determine the monitored parameters acid-water scrubbers:
- (i) For determining the ethylene glycol concentration, the facility owner or operator shall establish the maximum ethylene glycol concentration as the ethylene glycol concentration averaged over three test runs; the sampling and analysis procedures in ASTM D 3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography.

- (ii) for determining the scrubber liquor tank level, the sterilization facility owner or operator shall establish the maximum liquor tank level based on a single measurement of the liquor tank level during one test run.
 - (C) The following procedures shall be used to demonstrate the baseline temperature for the catalytic oxidation units or thermal oxidation units and to continuously monitor the oxidation temperature as required by this measure.
 - (i) The baseline temperature for the sterilization chamber vent shall be the temperature for the catalytic oxidation unit or oxidation temperature at the exhaust point from the thermal oxidation unit averaged over three test runs using the procedures in Test Method 431 and subsection (f)(2)(A).
 - (D) A facility seeking to demonstrate compliance with the standards with a control device other than an acid-water scrubber or catalytic or thermal oxidation unit shall submit: a description of the device; tests collected in accordance with the test method cited within or an approved method verifying the performance of the device for controlling ethylene oxide emissions to the levels required by the applicable standards; the appropriate operating parameters that will be monitored; and the frequency of measuring and recording to establish continuous compliance with the standards. The monitoring plan is subject to the Administrator's approval. The owner or operator of the sterilization facility shall install, calibrate, operate, and maintain the monitor(s) approved by the Administrator based on the information submitted by the owner or operator. The owner or operator shall include in the information submitted to the Administrator proposed performance specifications and quality assurance procedures for their monitors.
 - (E) A facility seeking to demonstrate compliance with the standards with a monitoring device or procedure other than a gas chromatograph shall provide to the Administrator information describing the operation of the monitoring device or procedure and the parameter(s) that would indicate proper operation and maintenance of the device or procedure.
- (3) Compliance Testing Report
- (A) The facility shall send the district and Administrator an initial statement of compliance and test results within 60 days following the performance test.
 - (B) The facility shall submit (before a title V permit is issued) to the Administrator;
 - (i) the methods that were used to demonstrate compliance;
 - (ii) the results of any performance tests, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
 - (iii) the methods that will be used for determining compliance, including a description of monitoring and reporting requirements and test methods.

- (iv) A statement by the owner or operator of the affected existing, new, or modified source as to whether the source has complied with the relevant standard or other requirements.

(f) **Monitoring Requirements.** The owner or operator of a sterilizer or aerator shall monitor the parameters of the control system specified in this section to show compliance with the provisions of this regulation. If continuous monitoring systems are required, Appendix 1 should be consulted for their application. All monitoring equipment shall be installed such that representative measurements of emissions or process parameters which affect emissions from the source are obtained. For monitoring equipment purchased from a vendor, verification of the operational status of the monitoring equipment shall include, at a minimum, completion of the manufacturer's written specifications or recommendations for installation, operation, maintenance, and calibration of the system.

- (1) For sterilization facilities complying with the emission standard through the use of an acid-water scrubber, the owner or operator shall either:
 - (A) Sample the scrubber liquor and analyze and record once per week the ethylene glycol concentration using the test procedures in subsection (e)(2)(B)(i). Monitoring is required only if the scrubber unit has been operated during that week; or
 - (B) Measure and record once per week the level of the scrubber liquor in the recirculation tank. The owner or operator shall install, maintain, calibrate, and use a liquid level indicator to measure the scrubber liquor tank level (i.e., a visible depth gauge, a dipstick, a magnetic indicator, etc.)
 - (C) Operation of the facility with an ethylene glycol concentration in the scrubber liquor in excess of the maximum liquor tank level shall constitute a violation of the chamber exhaust vent standard for sources using 20,000 pounds or more of ethylene oxide per 12 consecutive months.
- (2) For sterilization facilities complying with the emission standards through the use of catalytic oxidation or thermal oxidation, the owner or operator shall continuously monitor and record the oxidation temperature at the outlet to the catalyst bed or at the exhaust point from the thermal combustion chamber using a temperature monitor. The temperature monitor shall be installed, calibrated, operated, and maintained to an accuracy within $\pm 5.6^{\circ}\text{C}$ ($\pm 10^{\circ}\text{F}$). The owner or operator shall verify the accuracy of the temperature monitor twice each calendar year with a reference temperature monitor (traceable to National Institute of Standards and Technology (NIST) standard, or with an independent temperature measurement device dedicated for this purpose). During accuracy checking, the probe of the reference device shall be at the same location as that of the temperature monitor being tested.

For sources using 20,000 pounds or more of ethylene oxide per 12 consecutive months, operation of the facility with the oxidation temperature, averaged over the cycle, more than 5.6°C (10°F) below the baseline temperature shall constitute a violation of the chamber exhaust vent standard

- (A) For the sterilization chamber vent, a data acquisition system for the temperature monitor shall compute and record an average oxidation

temperature over the length of the cycle (based on the length of the cycle used during the performance test) and a three-cycle block average every third cycle.

- (B) For the aeration room vent, a data acquisition system for the temperature monitor shall compute and record an average oxidation temperature each hour and a 3-hour block average every third hour.
 - (C) For the back draft valve (chamber exhaust vent), a data acquisition system for the temperature monitor shall compute and record an average oxidation temperature over the length of the cycle (based on the length of the cycle used during the performance test).
- (3) For sterilization facilities complying with the emission standards with the use of a control device other than acid-water scrubbers or catalytic or thermal oxidizers, the owner or operator shall monitor the parameters as approved by the administrator.
 - (4) For facilities continuously measuring the ethylene oxide concentration from the aeration room (after a control device) or in the sterilization chamber immediately prior to the operation of the chamber exhaust, the owner or operator shall follow either paragraph (A) or (B) of this subsection:
 - (A) Measure and record once per hour the ethylene oxide concentration at the outlet to the atmosphere from the aeration room vent after any control device. The owner or operator shall compute and record a 3-hour average every third hour. The owner or operator will install, calibrate, operate, and maintain a gas chromatograph to measure ethylene oxide. The daily calibration requirements are required only on days when ethylene oxide emissions are vented to the control device from the aeration vent.
 - (B) Measure and record the ethylene oxide concentration in the sterilization chamber immediately before the chamber exhaust is activated. The owner or operator shall install, calibrate, operate, and maintain a gas chromatograph to measure ethylene oxide concentration. The daily calibration requirements are required only on days when the chamber exhaust is activated.
 - (5) At facilities using 20,000 pounds or more of ethylene oxide per consecutive 12 months, seeking to comply with the standard by manifolded emissions from the chamber exhaust vent to a control device controlling emissions from another vent type (sterilization chamber vent and/or aeration room vent), shall monitor the control device to which emissions from the chamber exhaust vent are manifolded.

(g) Recordkeeping.

- (1) The owner or operator of a sterilizer or aerator subject to the emissions standards in subsection (d) Table I shall maintain records of all reports and notifications (including compliance notifications) in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. The files shall contain:

- (A) The occurrence and duration of each malfunction of the air pollution control equipment.

NOTE: Authority cited: Sections 39600, 39650, 395601, and 39666, Health and Safety Code.
Reference: Sections 39650, 39665, and 39666, Health and Safety Code, and 40 CFR, Part 63 Subpart O.

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 10
HEXAVALENT CHROMIUM EMISSIONS FROM COOLING TOWERS**

11-10-100 GENERAL

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11-10-300 STANDARDS

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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 10
HEXAVALENT CHROMIUM EMISSIONS FROM COOLING TOWERS
(Adopted November 15, 1989)

11-10-100 GENERAL

11-10-101 Description: The purpose of this Rule is to reduce emissions of hexavalent chromium from cooling towers by eliminating chromium based circulating water treatment programs.

11-10-102 Exemption, Discontinued Chromate Treatment: Sections 11-10-502 and 503 do not apply to cooling tower operators who have not used hexavalent chromium for water treatment since March 1, 1989.

11-10-200 DEFINITIONS

11-10-201 Cooling Tower: Any open water recirculation device that uses fans or natural draft to draw or force air to contact and cool water by evaporation.

11-10-202 Hexavalent Chromium/Chromate: Hexavalent chromium is a cancer-causing (toxic) substance existing as part of various inorganic chromate compounds, for example, sodium dichromate or lead chromate.

11-10-203 Water Treatment Chemicals: Any combination of chemicals added to cooling tower water including tracers, corrosion inhibitors, antiscalants, dispersants, biocides.

11-10-300 STANDARDS

11-10-301 Hexavalent Chromium Removal: Effective March 1, 1990, a person shall not operate any cooling tower in the District using hexavalent chromium chemicals.

11-10-302 Circulating Water Concentration-Wooden Cooling Towers: Effective March 1, 1990, a person shall not operate a wooden cooling tower in the District unless the following requirements are met:

302.1 March 1, 1990 to September 1, 1990: Hexavalent chromium levels in the circulating water are not to exceed 8 milligrams/liter of circulating water

302.2 After September 1, 1990: Hexavalent chromium levels in the circulating water are not to exceed 0.15 milligrams/liter of circulating water.

11-10-303 Circulating Water Concentration-Non-Wooden Cooling Towers: Effective March 1, 1990, a person shall not operate a non-wooden cooling tower unless the hexavalent chromium levels do not exceed 0.15 milligrams/liter of circulating water.

11-10-500 MONITORING AND RECORDS

11-10-501 Reporting-General: By December 1, 1989, any owner/operator of a cooling tower shall notify the District in writing regarding the following information about the cooling tower. After December 1, 1989, any operator/owner of any newly constructed cooling water tower shall provide the APCO with the following information at least 90 days before the tower is operated.

- 1) Where the cooling tower is located.
- 2) Who is the owner/operator of the tower.
- 3) Cooling tower type and materials of construction.
- 4) Whether hexavalent chromium based treatment chemicals were used in the cooling tower.
- 5) If hexavalent chromium based chemicals were previously used, when they were discontinued.
- 6) A description of the alternate treatment program chosen, as well as the circulating water monitoring plan.

11-10-502 Monitoring-General: Effective March 1, 1990, any person subject to Sections 11-10-302 and 303 shall test the circulating water at least once every six calendar months to determine the concentration of hexavalent chromium. The first test shall be performed during March, 1990. Testing may be discontinued when two consecutive required tests show hexavalent chromium concentrations less than 0.15 milligrams per liter of circulating water. The APCO reserves the right to require testing of the circulating water at any time, if the District has reason to believe the water may contain hexavalent chromium.

11-10-503 Monitoring-Wooden Cooling Towers:

503.1 March 1, 1990 until September 1, 1990: Any person subject to Section 11-10-302.1 shall test the circulating water at least once every calendar month to determine the concentration of hexavalent chromium.

503.2 After September 1, 1990: Any person subject to Section 11-10-302.2 shall test the circulating water at least once every six calendar months to determine the concentration of hexavalent chromium. Testing may be discontinued when two consecutive required tests show hexavalent chromium concentrations less than 0.15 milligrams per liter of circulating water. The APCO reserves the right to require testing of the circulating water at any time, if the District has reason to believe the water may contain hexavalent chromium.

11-10-504 Operating Records: Any person subject to Sections 11-10-302 and 303 shall maintain records of the results of all required tests of circulating water for two years and give them to the District when requested.

11-10-600 MANUAL OF PROCEDURES

11-10-601 Determination of Hexavalent Chromium in Circulating Water: Samples of circulating water shall be analyzed for hexavalent chromium as prescribed by American Public Health Method 312B or an equivalent method, as approved by the APCO.

REGULATION 11
HAZARDOUS POLLUTANTS
RULE 11
NATIONAL EMISSION STANDARD FOR BENZENE EMISSIONS FROM COKE
BY-PRODUCT RECOVERY PLANTS AND BENZENE STORAGE VESSELS
(Adopted July 18, 1990)

The provisions of Subpart L, "National Emission Standard for Benzene Emissions from Coke By-Product Recovery Plants," and Subpart Y, "National Emission Standard for Benzene Emissions from Benzene Storage Vessels," Title 40 of the Code of Federal Regulations Part 61 (40CFR61) in effect July 18, 1990, are made part of the Rules and Regulations of the Bay Area Air Quality Management District. Whenever any source is subject to more than one rule, regulation, provision or requirement relating to the control of any air contaminant, in cases of conflict or duplication, the most stringent rule, regulation, provision or requirement shall apply.

For the purpose of this Rule, the word "Administrator" as used in 40CFR61 shall mean the Air Pollution Control Officer of the Bay Area Air Quality Management District, except that the Air Pollution Control Officer shall not be empowered to determine compliance with Section 61.126 (d) and 61.273, not delegated.

SUBPART		U.S. EPA	BAAQMD
L	Date First Adopted	(54 FR 38073, Sept. 14, 1989)	July 18, 1990
	Date Last Amended	(56 FR 47404, Sept. 19, 1991)	Jan. 6, 1993
Y	Date First Adopted	(54 FR 38077, Sept. 14, 1989)	July 18, 1990

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 12
NATIONAL EMISSION STANDARD FOR BENZENE EMISSIONS FROM
BENZENE TRANSFER OPERATIONS AND BENZENE WASTE OPERATIONS
(Adopted July 18, 1990)**

The provisions of Subpart BB, "National Emission Standard for Benzene Emissions from Benzene Transfer Operations", and Subpart FF "National Emission Standard for Benzene Emissions from Benzene Waste Operations," Title 40 of the Code of Federal Regulations Part 61 (40CFR61) in effect July 18, 1990, are made part of the Rules and Regulations of the Bay Area Air Quality Management District. Whenever any source is subject to more than one rule, regulation, provision or requirement relating to the control of any air contaminant, in cases of conflict or duplication, the most stringent rule, regulation, provision or requirement shall apply.

For the purpose of this Rule, the word "Administrator" as used in Part 61 (40CFR61) shall mean the Air Pollution Control Officer of the Bay Area Air Quality Management District, except that the Air Pollution Control Officer shall not be empowered to determine compliance with Section 61.353, not delegated.

SUBPART	U.S. EPA	BAAQMD
BB Date First Adopted	(55 FR 8292, Mar. 7, 1990)	July 18, 1990
FF Date First Adopted	(55 FR 8292, Mar. 7, 1990)	July 18, 1990
Date Last Amended	(58FR3072, Jan. 7, 1993)	Jan. 5, 1994

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 13
MEDICAL WASTE INCINERATORS**

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**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 13
MEDICAL WASTE INCINERATORS
(Adopted January 16, 1991)**

11-13-100 GENERAL

- 11-13-101 Description:** The purpose of this rule is to control emissions of dioxins from medical waste incinerators.
- 11-13-102 Exemption, Crematoria:** The provisions of this Rule do not apply to those incinerators which are exclusively crematoria of human or animal remains.

11-13-200 DEFINITIONS

- 11-13-201 Dioxins:** Dibenzo-p-dioxins and dibenzofurans chlorinated in the 2,3,7, and 8 positions and containing 4,5,6, or 7 chlorine atoms. Expressed as 2,3,7,8, tetrachlorinated dibenzo-para-dioxin equivalents using current California Department of Health Services toxic equivalency factors.
- 11-13-202 Medical Facilities:** Medical offices, dental offices, clinics, hospitals, skilled nursing facilities, research facilities, clinical laboratories, surgery centers, diagnostic laboratories, and other providers of health care.
- 11-13-203 Medical Waste Incinerators:** Furnaces or other closed fire chambers that are used to dispose of wastes generated at medical facilities by burning.

11-13-300 STANDARDS

- 11-13-301 Emission Limitation:** The emissions of dioxins from a medical waste incinerator shall not exceed 10 nanograms per kilogram of waste burned.
- 11-13-302 Operating Requirements:** A person shall not operate a medical waste incinerator unless the following requirements are satisfied:
- 302.1** The flue gas temperature at the outlet of the air pollution control equipment shall not exceed 300°F, unless it has been demonstrated to, and approved in writing by the APCO that lower emissions of dioxins are achieved at a higher outlet temperature.
 - 302.2** For single chamber incinerators, the combustion chamber shall be maintained at no less than 1,650°F. For multiple chamber incinerators, the primary combustion chamber shall be maintained at no less than 1,400°F and the secondary combustion chamber shall be maintained at no less than 1,650°F.
 - 302.3** The incinerator design shall provide for a residence time of at least one second as specified in Section 11-13-602.
 - 302.4** The bottom ash, fly ash and air pollution control equipment residuals shall be handled and stored in a manner that prevents entrainment into ambient air.

11-13-400 ADMINISTRATIVE REQUIREMENTS

11-13-401 Compliance Schedule:

- 401.1** No later than 90 days after adoption of this Rule, the owner or operator of a medical waste incinerator shall submit to the APCO an application for an Authority to Construct for the construction or modification of any equipment necessary to meet the requirements of Sections 11-13-301 and 11-13-302.

401.2 No later than 15 months after adoption of this Rule, the owner or operator of a medical waste incinerator shall be in compliance with all provisions of the Rule.

11-13-402 Shutdown Notification: Any person who intends to permanently cease operation of their medical waste incinerator shall notify the APCO of the shutdown date within 90 days after adoption of this Rule. The shutdown date shall be no later than six months after adoption of this Rule.

11-13-403 Demonstration of Compliance: Any person subject to this Rule shall conduct a minimum of two annual source tests as specified in Section 11-13-601, for the purpose of demonstrating compliance with Section 11-13-301. Annual source tests shall be conducted until at least two consecutive annual tests demonstrate compliance. Further source testing may be required by the APCO in accordance with Regulation 1-441.

11-13-404 Operator Certification: No person shall operate a medical waste incinerator unless each individual who operates or maintains the incinerator obtains either a certificate of training in medical waste incineration issued by the American Society of Mechanical Engineers within nine months of the commencement of the training program, or equivalent training as determined by the APCO. Copies of the training certificates for the operators shall be submitted to the District and the original certificates shall be made available for inspection at the facility.

11-13-500 MONITORING AND RECORDS

11-13-501 Monitoring: Any person subject to this regulation shall maintain a continuous data recording system which provides for each day of operation continuous recording of the following:

501.1 Primary and secondary combustion chamber temperatures.

501.2 Carbon monoxide concentration in exhaust gases.

501.3 Key operating parameters of the air pollution control equipment, as specified by the APCO.

501.4 Hourly waste charging rate.

501.5 Opacity of stack emissions, or other indicator of particulate matter which is approved by the APCO.

11-13-502 Recordkeeping: Any person subject to this Rule shall keep a log of maintenance records for the incinerator, air pollution control equipment, and monitoring equipment. Such records shall be retained on-site and made available for District inspection upon request.

11-13-600 MANUAL OF PROCEDURES

11-13-601 Determination of Emissions: Emissions of dioxins shall be measured as prescribed in ARB Test Method 428.

601.1 For purpose of determining compliance with Section 11-13-301, the source testing shall be conducted at the exhaust stack.

601.2 Source testing shall be conducted at the maximum waste firing capacity allowed by District permit conditions.

601.3 Source testing shall be conducted utilizing waste of a typical composition.

11-13-602 Determination of Residence Time: For the purpose of determining compliance with Section 11-13-302.3, residence time shall be calculated as follows:

Residence Time = V/Q_c , where

V = the internal volume of the incinerator, expressed in cubic feet, where the temperature is maintained at 1,650°F or greater.

Q_c = the combustion gas flow through V , expressed in actual cubic feet per second, as determined using the Manual of Procedures, Volume IV, ST-17 corrected to actual secondary combustion chamber temperature.

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REGULATION 11
HAZARDOUS POLLUTANTS

RULE 14

ASBESTOS-CONTAINING SERPENTINE
(Adopted July 17, 1991)

11-14-100 GENERAL

- 11-14-101 Description:** The purpose of this Rule is to control emissions of asbestos from unpaved road surfaces and other surfacing operations.
- 11-14-102 Exemption, Sand and Gravel Operations:** Sand and gravel operations as defined in Section 11-14-207 are exempt from the limitations of Section 11-14-300.
- 11-14-103 Exemption, Quarry Roads:** Roads located at serpentine quarries, asbestos mines or mines located in serpentine deposits are exempt from the provisions of Section 11-14-301.
- 11-14-104 Exemption, Maintenance and Emergency Road Repairs:** Maintenance operations on any existing serpentine road surfaces, or road repairs necessary due to landslide, flood or other emergency are exempt from the provisions of Section 11-14-301 if the use of material other than serpentine is not feasible for the repair.
- 11-14-105 Exemption, Bituminous and Concrete Materials:** Serpentine material that is an integral part of bituminous concrete, portland cement concrete, bituminous surface, or other similar cemented materials is exempt from the provisions of Section 11-14-301.

11-14-200 DEFINITIONS

- 11-14-201 Aggregate:** A mixture of mineral fragments, sand, gravel, rocks, or similar minerals.
- 11-14-202 Alluvial Deposit:** Any deposit of sediments laid down by running water including but not limited to streams and rivers.
- 11-14-203 Asbestos:** Asbestiforms of the following hydrated minerals: chrysotile (fibrous serpentine), crocidolite (fibrous riebeckite), amosite (fibrous cummingtonite-grunerite), fibrous tremolite, fibrous actinolite, and fibrous anthophyllite.
- 11-14-204 Asbestos-Containing Serpentine Material:** Serpentine material that has an asbestos content greater than five percent (5.0%).
- 11-14-205 Receipt:** Any written acknowledgement that a specified amount of serpentine material was received, delivered, or purchased. Receipts include, but are not limited to, bills of sale, bills of lading, and notices of transfer.
- 11-14-206 Road Surface:** The traveled way of a road and any shoulder which extends up to 10 feet from the edge of the traveled way.
- 11-14-207 Sand and Gravel Operation:** Any aggregate-producing facility operating in alluvial deposits.
- 11-14-208 Serpentine:** Any form of hydrous magnesium silicate minerals including, but not limited to, antigorite, lizardite, and chrysotile.
- 11-14-209 Serpentine Material:** Any material that contains at least ten percent (10%) serpentine as determined by a registered geologist. The registered geologist must document precisely how the serpentine content of the material in question was determined.

11-14-210 Surfacing: The act of covering any surface used for purposes of pedestrian, vehicular, or nonvehicular travel including, but not limited to, roads, road shoulders, streets, alleys, lanes, driveways, parking lots, playgrounds, trails, squares, plazas, and fairgrounds. For the purposes of this Regulation, surfacing shall not include cut-slopes or fills which are not intended for pedestrian, vehicular or nonvehicular travel, nor shall surfacing include roofing or the decorative use of rock.

11-14-300 STANDARDS

11-14-301 Prohibition of Use for Surfacing Operations: No person shall use or apply serpentine material for surfacing in the District unless the material has an asbestos content of five percent (5.0%) or less.

11-14-302 Prohibition of Sale for Surfacing Operations: No person shall sell, supply, or offer for sale serpentine material for surfacing in the District unless the serpentine material has an asbestos content of five percent (5.0%) or less.

11-14-400 ADMINISTRATIVE REQUIREMENTS

11-14-401 Written Warning: Any person who sells, supplies, or offers for sale serpentine material shall provide with each sale or supply a written warning containing the following statement: "Serpentine material may have an asbestos content greater than five percent (5.0%). It is unlawful to use serpentine material for surfacing unless the material has been tested and found to contain less than or equal to five percent (5.0%) asbestos. All tests for asbestos content must use California Air Resources Board Test Method 435, and a written record documenting the test results must be retained for at least seven years if the material is used for surfacing."

11-14-402 Written Receipts: Any person who sells, supplies, or offers for sale serpentine material that is represented, either orally or in writing, to be suitable for surfacing or to have an asbestos content that is five percent (5.0%) or less, shall provide to each purchaser or person receiving the serpentine material a written receipt which specifies the following information:

a) the amount of serpentine material sold or supplied;

b) the dates that the serpentine material was produced, sampled, tested, and supplied or sold;

c) the asbestos content of the serpentine material as measured by ARB Test Method 435.

A copy of the receipt must, at all times, remain with the serpentine material during transit and surfacing.

11-14-500 MONITORING AND RECORDS

11-14-501 Maintenance of Records: Any person who sells, supplies, offers for sale, uses or applies serpentine material shall retain for a period of at least seven years from the date of sale or supply, copies of all receipts and copies of any analytical test results from asbestos testing of the serpentine material. All receipts and test results shall be provided to the Air Pollution Control Officer for review upon request.

11-14-600 MANUAL OF PROCEDURES

11-14-601 Test Method: All serpentine material supplied, sold, or offered for sale as a surfacing agent shall be tested in accordance with ARB Test Method 435, as specified in Title 17, California Code of Regulations, Section 94147.

11-14-602 Averaging of Test Results: If ARB Test Method 435 has been used to perform two or more tests on any one volume of serpentine material, whether by the same or a different person, the arithmetic average of these test results shall be used to determine the asbestos content of the serpentine material.

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 15
AIRBORNE TOXIC CONTROL MEASURE FOR EMISSIONS OF TOXIC
METALS FROM NON-FERROUS METAL MELTING**

California State Health and Safety Code Section 39666 directs the Air Resources Board to develop air toxic control measures (ATCMs) to reduce emissions of toxic air contaminants from non-vehicular sources, and for local air quality management or air pollution control districts to implement and enforce these control measures.

Since adoption into law in 1983, Section 39666 of the Health and Safety Code has required local air quality management districts to adopt the model state ATCM as a district regulation in district language and format or to adopt an equivalent or more stringent control measure. Assembly Bill 2728 (AB 2728), passed by the California Legislature in 1992, revised section 39666. These revisions provide the districts with the option of directly enforcing the statewide ATCM without the need to adopt it as a district regulation in district language and format (although such adoption is permissible).

Regulation 11, Rule 15 - Airborne Toxic Control Measure for Emissions of Toxic Metals from Non-Ferrous Metal Melting are hereby made part of the Rules and Regulations of the Bay Area Air Quality Management District. Whenever any source is subject to more than one rule, regulation, provision or requirement relating to the control of any air contaminant, in cases of conflict or duplication, the most stringent rule, regulation, provision or requirement shall apply.

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 15
AIRBORNE TOXIC CONTROL MEASURE FOR EMISSIONS OF TOXIC
METALS FROM NON-FERROUS METAL MELTING**

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REGULATION 11
HAZARDOUS POLLUTANTS
RULE 15
AIRBORNE TOXIC CONTROL MEASURE FOR EMISSIONS OF TOXIC
METALS FROM NON-FERROUS METAL MELTING
(Adopted April 6, 1994)

Adopt new section 93107, Title 17, California Code of Regulations to read as follows:

93107 Airborne Toxic Control Measure for Emissions of Toxic Metals from Non-Ferrous Metal Melting

(a) **DEFINITIONS**

For the purposes of this section, the following definitions shall apply:

- (1) "Aluminum And Aluminum-based Alloys" means any metal that is at least 80% aluminum by weight.
- (2) "ARB Test Method 5" means the test method specified in Title 17, California Code of Regulations, section 94105.
- (3) "Clean Aluminum Scrap" means scrap that is composed solely of aluminum or aluminum alloys (including anodized aluminum) and that is free of paints, coatings, rubber, or plastics.
- (4) "Copper Or Copper-based Alloy" means any metal that is more than 50 percent copper by weight, including but not limited to brass and bronze.
- (5) "District" means the air quality management district or air pollution control district with jurisdiction over the facility.
- (6) "Dust Forming Material" means any material containing more than 15 percent by weight of particulate matter less than 0.84 millimeter (mm) equivalent diameter as determined by ASTM C136-84a "Standard Method for Sieve Analysis of Fine and Coarse Aggregates" using a number 20 U.S. Bureau of Standards sieve with 0.84-mm square openings or an alternate method deemed acceptable by the district Air Pollution Control Officer or Executive Officer.
- (7) "Emission Collection System" means equipment which is installed for the purpose of directing, taking in, confining, and conveying an air contaminant and which conforms to specifications for design and operation given in Industrial Ventilation, Manual of Recommended Practices, 20th edition, 1988, published by the American Conference of Government and Industrial Hygienists, which is incorporated by reference herein.
- (8) "Emission Point" means any location where molten metal is or can be exposed to air, including but not limited to furnaces, crucibles, refining kettles, ladles, tap holes, pouring spouts, and slag channels. A mold or die in which metal is cooling is not considered an emission point.
- (9) "Enclosed Storage Area" means any space used to contain materials that has a wall or partition on at least three sides or three-quarters of its circumference and that screens the material stored therein to prevent emissions of the material into the air.
- (10) "Facility " means any real or personal property being used for metal melting activities, which is located on one or more contiguous or adjacent parcels of property in actual contact or separated only by a

public roadway or other public right-of-way, and owned or operated by the same person or persons, corporation, government agency, public district, public officer, association, joint venture, partnership, or any combination of such entities.

- (11) **"Fugitive Emission Control"** means any equipment, activity, or process carried out to reduce emissions resulting either from the storage or handling of dust forming materials or material collected by a particulate matter control system or the removal of particulate matter from metal melting or pouring that has settled on the ground or other surfaces or that has escaped from a properly designed and operated emission collection system.
- (12) **"Good Operating Practices"** means specific activities necessary to maintain the original collection and control efficiencies of the air pollution control equipment as designed. These activities include but are not limited to verifying operating specifications such as cleaning cycles, air flow, and velocity; and inspecting equipment such as duct work, blowers, and components of the control equipment through a general maintenance and inspection program.
- (13) **"Hard Lead"** means any alloy containing at least 90 percent lead and more than 0.001 percent arsenic by weight or 0.001 percent cadmium by weight.
- (14) **"Molten Metal"** means metal or metal alloy in a liquid state in which a cohesive mass of metal will flow under atmospheric pressure and take the shape of a container in which it is placed.
- (15) **"Metal Melting Furnace"** means any apparatus in which metal in a container is brought to a liquid state, including but not limited to reverberatory, cupola, induction, direct arc furnaces, sweat furnaces, and refining kettles. "Metal melting furnace" does not include any apparatus in which the metal is heated but does not reach a molten state such as a sintering furnace or an annealing furnace.
- (16) **"New Sand"** means any sand not exposed to the casting process.
- (17) **"Non-Ferrous Metal"** means lead, copper, zinc, cadmium, arsenic, aluminum, and their alloys.
- (18) **"Particulate Matter" Or "PM"** means any solid material, except uncombined water, which exists in a finely divided form at standard conditions of temperature and pressure (293 K and 760 mm mercury).
- (19) **"Particulate Matter Control System"** means any device or series of devices designed and operated in a manner intended to remove fine particulate matter (< 10 μ m) from an air or gas stream.
- (20) **"Person"** shall have the same meaning as defined in Health and Safety Code Section 39047.
- (21) **"Process Emission Control"** means any equipment installed and operated to control emissions of toxic metals from any emission point as defined in subsection (a)(8).
- (22) **"Pure Lead"** means any alloy that is at least 90 percent lead and contains no more than 0.001 percent cadmium by weight and 0.001 percent arsenic by weight.
- (23) **"Ringelmann Chart"** means the Ringelmann Chart published in the United States Review of Mine Information Circular No. 1C8333, May 1967, as specified in Health and Safety Code Section 41701(b).
- (24) **"Scrap"** means any metal or metal-containing material that has been discarded or removed from the use for which it was produced or manufactured and which is intended for reprocessing. "Scrap" does not include sprues, gates, risers, foundry returns, and similar material intended for remelting that has been generated at the facility as a

- consequence of casting or forming processes but has not been coated or surfaced with any material containing cadmium, arsenic, or nickel.
- (25) "Solder" means any metal in which the sum of the lead and the tin is greater than 50 percent by weight and which is used for the purpose of joining two metals or of joining a metal to any other material.
- (26) "Type Metal" means any lead-based alloy used for linotype machines.

(b) REQUIREMENTS

No person shall operate a non-ferrous metal melting furnace unless the facility is in compliance with all the requirements specified in subsections (b)(1) through (b)(3).

(1) Emission Collection System

- (A) All emission points shall be equipped with an emission collection system designed and operated according to criteria specified in subsection (a)(7). The design criteria and operating parameters shall be specified as conditions of the authority to construct and the permit to operate granted by the District to the source for the equipment.
- (B) Good operating practices shall be used by the facility, and demonstrated through a maintenance plan or procedures approved by the District, to maintain air movement and emission collection efficiency by the system consistent with the design criteria for the system. The maintenance plan shall specify, at a minimum, the following:
- (i) Maximum allowable variation from designed values of operating parameters, such as air velocity in the hood and ducts and pressure drop across the control device.
 - (ii) Areas to be visually inspected, such as the clean side of the baghouse and ducts operating under positive pressure, and the required frequency of such inspections.
 - (iii) Methods of documenting compliance with these requirements such as a log of such inspections and records of observations and measurements.

(2) Process Emission Control

The gas stream from the emission collection system required by subsection (b)(1) shall be ducted to a particulate matter control device meeting the requirements of this section.

- (A) The particulate matter control device shall reduce particulate matter emissions by 99 percent or more.
- (B) The temperature of the gas stream entering any particulate matter control device that is part of an emission collection system shall not exceed 360 degrees Fahrenheit. A device to be used for making this measurement shall be maintained at the facility and shall be made available to a district representative upon his or her request.
- (C) The owner or operator of the facility shall demonstrate compliance with subsection (b)(2)(A) by conducting an initial source test to verify the 99 percent reduction in particulate matter as determined by means of an emissions test conducted in accordance with ARB Test Method 5. The District Air Pollution Control Officer or Executive Officer may require additional source testing to verify continued compliance or when the process is changed. Particulate matter reduction shall be calculated using the following equation:

$$\frac{[\text{Mass in} - \text{Mass out}]}{\text{Mass in}} \times 100 = \text{particulate matter reduction}$$

where:

- Mass in = Mass of particulate matter at the inlet to the control device
- Mass out = Mass of particulate matter at the outlet of the control device
- Mass = Sum of filter catch, probe catch, impinger catch, and solvent extract

(d) Testing Access

The owner or operator of any facility subject to subsection (b)(2) of this regulation shall provide access and sampling ports sufficient to perform testing in accordance with ARB Test Method 5. Ducts and stacks shall have sampling ports so placed as to satisfy minimum requirements for method 5 testing with regard to flow disturbances, or acceptable alternative requirements as approved by the Air Pollution Control Officer or Executive Officer of the District.

(3) Fugitive Emission Control

- (A) No activity associated with metal melting at a facility including furnace operation, casting, emission control system operation, and the storage, handling, or transfer of any materials (except new sand) shall discharge into the air any air contaminant, other than uncombined water vapor, for a period aggregating more than three minutes in any hour which is:
 - (i) Half as dark or darker in shade as that designated as Number 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
 - (ii) Of such opacity as to obscure an observer's view to a degree equal to or greater than smoke as described in subsection (b)(3)(A)(i) or 10% opacity.
- (B) Dust-forming material including, but not limited to, dross, ash, or feed material shall be stored in an enclosed storage area or stored in a manner which meets the requirements of subsection (b)(3)(A).
- (C) Material collected by a particulate matter control system shall be discharged into closed containers or an enclosed system that is completely sealed to prevent any dust from getting out.
- (D) Surfaces that are subject to vehicular or foot traffic shall be vacuumed, wet mopped, or otherwise maintained in accordance with a District-approved maintenance plan. The plan shall specify, at a minimum: the areas to be cleaned, the method to be used, the required frequency of the cleaning activities, and a method of documenting the completion of the required activities. The plan shall be designed and carried out in a way which will meet the requirements of subsection (b)(3)(A).

(c) EXEMPTIONS

- 1) **Small Quantity Exemptions.** Facilities are exempt from subsections (b)(1), (b)(2), and (b)(3) if they meet either of the following conditions:

- (A) Melt a total of no more than one ton per year of all metals, or
- (B) Melt no more than the listed quantities of any one of the specific metals listed in Table I.

Table I

<u>Metal</u>	<u>Exemption Limit (tons per year)</u>
Pure Lead	400
Hard Lead	200
Aluminum Scrap	125
Aluminum ingot containing more than 0.004 percent cadmium or 0.002 percent arsenic	125
Solder	100
Zinc Scrap	30
Copper or Copper-based alloys (except scrap) containing more than 0.004 percent cadmium or 0.002 percent arsenic	30
Type Metal (lead for linotype machines)	25

- (i) For facilities melting more than one of the metals listed in Table I, eligibility for exemption shall be determined using the following calculation:
For each metal listed in table divide the quantity melted by the specific exemption limit listed.
Sum the resulting fractions for all the metals.
If the sum does not exceed 1.0, the facility qualifies for exemption under subsection (c)(1).
- (2) **Metal or Alloy Purity Exemption.** Facilities or furnaces which do not melt scrap except clean aluminum scrap and which melt a metal or alloy (other than the metals listed in Table I) which is shown by the facility operator to have a content of no more than 0.004 percent of cadmium and no more than 0.002 percent of arsenic are exempt from subsections (b)(1), (b)(2), and (b)(3). A facility granted an exemption under subsection (c)(1)(B) may also be granted exemption for all metals that meet the purity limits in this subsection.
- (3) **Clean Aluminum Scrap Exemption.** Furnaces used exclusively to process clean aluminum scrap or a mixture of clean aluminum scrap and aluminum ingot to produce extrusion billet are exempt from subsections (b)(1) and (b)(2).
- (4) **Exemption for Aluminum Furnaces.** The combustion chamber in a reverberatory furnace is exempt from the requirements of subsections (b)(1) and (b)(2) if the furnace meets both of the following conditions:
 - (A) The furnace is used solely to produce aluminum and aluminum-based alloys, and
 - (B) The furnace is constructed with a charging well or similar device in which feed is added to molten metal in a separate chamber.
- (5) **Aluminum Pouring Exemption.** Ladles, launders or other equipment used to convey aluminum from a melting or holding furnace to casting equipment is exempt from the requirements of subsections (b)(1) and (b)(2).

(d) COMPLIANCE SCHEDULE

- (1) Application for exemption from control requirements.** Facilities seeking exemption under subsections (c)(1) or (c)(2) or (c)(3) shall apply and submit evidence of eligibility for exemption to the District no later than six months after the District adopts regulations enacting this control measure.
- (2) Emission control requirements.** Facilities subject to this section shall apply to the District for an authority to construct the emission collection system and the air pollution control equipment necessary to comply with subsection (b) no later than 12 months after the District adopts the regulations enacting this control measure. These facilities shall be in compliance no later than 24 months after the District adopts the regulations enacting this control measure.

(e) RECORDKEEPING

- (1) Facilities subject to subsection (b) shall maintain on site for a period of two years, and make available to a District representative upon request, a record of:**
 - (A)** The results of any source testing required by the District to demonstrate that the particulate matter control device(s) are operating as required by subsection (b)(2)(A).
- (2) Facilities seeking exemption under subsections (c)(1) or (c)(2) or (c)(3) shall maintain for two years a record of the amount and type of metal processed in those furnaces including results of analyses as required to support exemption under subsection (c)(2). These records shall be made available to a representative of the District upon request.**

(f) APPLICABLE MATERIAL TESTING METHODS

One of the following methods or an alternate method deemed acceptable by the District Air Pollution Control Officer or Executive Officer and by the Executive Officer of the Air Resources Board shall be used.

Sampling for these methods shall comply with ASTM E 88-58 (1986), "Standard Practice for Sampling Nonferrous Metals and Alloys in Cast Form for Determination of Chemical Composition."

- (1) To determine the composition of alloys defined in section (a)(1) and to determine the cadmium content of aluminum alloys to evaluate eligibility for exemption under section (c)(2) one of the following shall be used:**
 - (A)** ASTM E 227-67 (1982), "Standard Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Point-to-Plan Technique";
 - (B)** ASTM E 607-90, "Standard Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Point-to-Plane Technique, Nitrogen Atmosphere"; or
 - (C)** ASTM E 1251-88, "Standard Test Method for Optical Emission Spectrometric Analysis of Aluminum and Aluminum Alloys by the Argon Atmosphere, Point-to-Plane, Unipolar Self-Initiating Capacitor Discharge".

- (2) To determine alloy composition as defined in subsections (a)(13) and (a)(22), ASTM E 117-64 (1985), "Standard Method for Spectrographic Analysis of Pig Lead by the Point-to-Plane Technique" shall be used.
- (3) To determine alloy composition as defined in section (a)(25), ASTM E 46-87, "Test Method for Chemical Analysis of Lead- and Tin-Base Solder" shall be used.
- (4) To determine cadmium concentration in zinc and zinc alloys to evaluate eligibility for exemption under section (c)(2), ASTM E 536-84 (1988), "Standard Test Method for Chemical Analysis of Zinc and Zinc Alloys," shall be used.
- (5) To determine cadmium concentration in copper and copper-based alloys to evaluate eligibility for exemption under section (c)(2), ASTM E 53-86a, "Standard Test Methods for Chemical Analysis of Copper," shall be used.
- (6) To determine arsenic concentration in copper or copper-based alloys to evaluate eligibility for exemption under section (c)(2), ASTM E 62-89, "Standard Test Method for Chemical Analysis of Copper and Copper Alloys" shall be used.
- (7) To determine arsenic content in aluminum or zinc (or any other alloy in which determination of arsenic by spectrochemical methods is compromised by interference) to evaluate eligibility for exemption under section (c)(2), EPA method 7061 (Revision 1, December 1987), "Arsenic (Atomic Absorption, Gaseous Hydride)," published in U.S.EPA Test Methods for Evaluating Solid Waste Physical and Chemical Methods. First Update (3rd Edition), January 1988; EPA/530/SW-846.3-1; PB 89-14876, shall be used in the following manner:
 - (A) For aluminum alloys, sample digestion shall employ the hydroxide digestion technique given in Appendix A to this control measure.

(g) ALTERNATIVE COMPLIANCE OPTION.

A district may approve an alternative approach to compliance proposed by the facility operator, if the facility operator demonstrates to the satisfaction of the district Executive Officer or Air Pollution Control Officer that the alternative is enforceable, achieves the same or better reductions in emissions and risk and achieves these reductions within the same time period as required by this airborne toxic control measure. The alternative approach shall also be consistent with the federal Clean Air Act. The District shall revoke this approval if the facility operator fails to adequately implement the alternative approach or the alternative approach does not reduce emissions as required. The District shall notify the state board whenever it proposes to approve an alternative approach to compliance to this airborne toxic control measure.

NOTE: Authority cited: Sections 39600, 39601, 39650, 39655, and 39666, Health and Safety Code.
Reference: Sections 39650 and 39666, Health and Safety Code.

APPENDIX A

DIGESTION OF METAL ALUMINUM SAMPLE FOR DETERMINING ARSENIC (As)

1. Introduction:

Metal Aluminum cannot react with nitric acid or concentrated sulfuric acid. It can dissolve in dilute sulfuric acid or hydrochloric acid. Active hydrogen, generated during the acid digestion process; will reduce arsenic to AsH_3 , which will escape from solution, resulting in a low or negative arsenic value. The proposed method sets up a protocol to dissolve metal alumina without loss of arsenic.

2. Reagent:

3M NaOH, 10% $HgSO_4$ Solution, 30% H_2O_2
1:1 H_2SO_4 , Concentrated HNO_3 , Tiling Copper

3. Procedure:

3.1 Dissolve

3.1.1 Dissolve using NaOH (Method 1)

Weigh 0.5g of metal aluminum sample to a 125ml Erlenmeyer flask, add 15 ml of 3M NaOH solution, allow to react and dissolve about 20 min. Again add 10ml of 3M NaOH, continue reaction until no gas bubbles are present and the sample is dissolved completely.

3.1.2 Dissolve using $HgSO_4$ (Method 2)

Weigh 0.5g of metal Aluminum sample to a 125ml Erlenmeyer flask, add 10ml of 10% $HgSO_4$ solution and 5ml of 30% H_2O_2 . After 20 minutes, add appropriate amount of $HgSO_4$. Allow reaction to continue until no gas bubbles are present. Add metal copper strips (large surface area) into the sample solution. After 10 minutes, withdraw the copper strips and add new copper strips. Repeat until the surface of copper strips in sample solution do not change to a silver color. Withdraw all copper strips from sample solution.

3.2 Digestion

Add 3ml of concentrated HNO_3 , 5ml of 1:1 H_2SO_4 into the sample solution obtained from 3.1.1 or 3.1.2. Heat slowly and evaporate the sample solution until SO_3 fumes are present for 5 minutes. Cool and dilute the sample to 50.0ml. Determined As by Atomic Absorption method.

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 16
PERCHLOROETHYLENE AND SYNTHETIC SOLVENT
DRY CLEANING OPERATIONS**

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**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 16
PERCHLOROETHYLENE AND SYNTHETIC SOLVENT
DRY CLEANING OPERATIONS
(Adopted December 21, 1994)**

11-16-100 GENERAL

- 11-16-101 Description:** The purpose of this Rule is to limit emissions of synthetic solvent from dry cleaning operations and other related operations, and to limit exposure to perchloroethylene, a compound identified as a toxic air contaminant by the California Air Resources Board. This rule is consistent with requirements of the Airborne Toxic Control Measure adopted by the California Air Resources Board (Title 17, California Code of Regulations, Section 93109), Airborne Toxic Risk Reduction Measures (sections 44390 and 44391 of the California Health and Safety Code), and the National Perchloroethylene Air Emissions Standards for Dry Cleaning Facilities, promulgated by the Environmental Protection Agency (40 CFR, Part 63, Subpart M).
- 11-16-102 Applicability:** Any person who performs dry cleaning or other related operations (water repellent treatment and dip tank operations) that use perchloroethylene or any other synthetic solvent shall comply with this rule. Operation of any equipment associated with dry cleaning that uses or contains synthetic solvent is subject to this rule. The requirements of this rule may be in addition to those found in other District rules and regulations. New, modified, relocated, or replacement equipment shall be given pre-construction review and granted authority to construct in accordance with Regulation 2, Rule 1-301. Dry cleaning installations or modifications may be considered ministerial in accordance with Regulation 2, Rule 1, sections 311, 427, and 428 if reviewed, constructed, and operated in accordance with the District's Permit Handbook for Synthetic Solvent Dry Cleaners (Manual of Procedures, Volume II, Chapter 6) and Risk Management Policy for Dry Cleaners (MOP, Vol. II, Ch. 6, Appendix A).
- 11-16-103 Exemption, Other Solvents:** This rule does not apply to dry cleaning facilities which do not use synthetic solvents. Dry cleaning using petroleum solvent (including non-halogenated synthetic petroleum solvent) is subject to Regulation 8, Rule 17, "Petroleum Dry Cleaning Operations".
- 11-16-104 Limited Exemption, Relocated Facilities:** Relocation of a closed-loop or a previously converted machine to a non-residential facility within the District shall be exempt from subsection 302.1, which requires secondary control systems at new facilities. A relocated machine is subject to subsections 301.1 and 302.2. New or replacement equipment at a relocated facility shall not be eligible for this exemption.
- 11-16-105 Limited Exemption, Drying Cabinets:** Sections 301, 302, and 303 shall not be applicable to drying cabinets used exclusively for delicate and specialty articles which are likely to be damaged when dried in converted or closed-loop machines. Drying cabinets are subject to subsection 305.5.
- 11-16-106 Limited Exemption, Pass-through Clean-room Garment Cleaners:** Subsections 301.1 and 304.7 shall not apply to existing pass-through clean-room garment cleaners that cannot be feasibly converted to closed-loop systems. These devices shall instead be subject to subsection 305.6.
- 11-16-107 Limited Exemption, Non-carcinogenic Synthetic Solvents:** Equipment using exclusively the following synthetic solvents shall not be subject to the equipment and ventilation provisions of Section 303 but shall instead be subject to sections 301 and 302: 111-trichloroethane (111-TCA) and trichlorotrifluoroethane (Valciene or CFC-113).

11-16-200 DEFINITIONS

- 11-16-201 Adsorptive Cartridge Filter:** A replaceable cartridge filter that contains diatomaceous earth or activated clay as the filter medium.
- 11-16-202 Air Change Rate:** The number of displacements of a volume of air (equal to the volume of a restricted working region of a facility where solvent emissions occur) in a specific time period. A 5000 cubic feet per minute fan would cause one air change every five minutes (or 12 air changes per hour) for a working region with a volume of 25,000 cubic feet.
- 11-16-203 Capture Velocity:** The velocity (speed) of air created by a ventilation system, measured in feet per minute, at fugitive emission points (e.g. loading door) or at intended openings in structures that isolate/contain the dry cleaning equipment. Generally an "adequate" ventilation system captures at least 90% of the fugitive emissions and has a capture velocity of 100 to 200 feet per minute.
- 11-16-204 Cartridge Filter:** A replaceable cartridge filter that contains one of the following as the filter medium: paper, activated carbon, or paper and activated carbon. A cartridge filter contains no diatomaceous earth or activated clay. Cartridge filters include, but are not limited to: standard filters, split filters, "jumbo" filters, and all carbon polishing filters.
- 11-16-205 Closed-loop Machine:** (Also known as vent-less dry-to-dry) dry cleaning equipment in which washing, extraction, and drying are all performed in the same single unit and which recirculates solvent-laden vapor through a primary control system with no exhaust to the atmosphere during the drying cycle. A closed-loop machine may allow for venting to the ambient air through a fugitive control system after the drying cycle is complete and only while the machine door is open. A closed-loop machine with a secondary control system may also be referred to as a secondary control machine.
- 11-16-206 Co-located with a Commercial Business - "Co-commercial":** Sharing a building (or sharing a common wall, floor, or ceiling) with another commercial or industrial business.
- 11-16-207 Co-located with a Residence - "Co-residential":** Sharing a building with a residence or sharing a common wall, floor, or ceiling with a residence. For the purposes of this definition, "residence" means any dwelling or housing which is owned, rented, or occupied by the same person for a period of 180 days or more, excluding short-term housing such as a motel or hotel room rented and occupied by the same person for a period of less than 180 days.
- 11-16-208 Control Device:** A device for reducing emissions of synthetic solvent to the atmosphere including but not limited to, vapor adsorbers and refrigerated condensers.
- 11-16-209 Converted Machine:** A previously existing vented machine that has been modified to be a closed-loop machine by eliminating the aeration step, installing a primary control system, and providing for recirculation of the solvent-laden vapor with no exhaust to the atmosphere or workroom during the drying cycle. A converted machine may allow for venting to the ambient air through a fugitive control system after the drying cycle is complete and only while the machine door is open.
- 11-16-210 Cool-down:** The portion of the drying cycle that begins when the heating mechanism deactivates and the refrigerated condenser continues to reduce the temperature of the air recirculating through the drum to reduce the concentration of solvent in the drum.
- 11-16-211 Date of Compliance:** The date by which a facility shall be in compliance with a specific requirement of this rule.
- 11-16-212 Deodorization:** The last step of the drying cycle for a vented machine or reclaimer during which fresh air is used to strip residual solvent from materials and is exhausted through a control device.
- 11-16-213 Desorption:** Regeneration of an activated carbon bed, or any other type of vapor adsorber by removal of the adsorbed solvent using hot air, steam, or other means.
- 11-16-214 Dip Tank Operations:** The immersion of materials in a solution that contains solvent, for purposes other than dry cleaning, in a tank or container that is separate from the dry cleaning equipment.
- 11-16-215 District:** The Bay Area Air Quality Management District.
- 11-16-216 Drum:** The rotating cylinder or wheel of the dry cleaning machine that holds the materials being cleaned.

- 11-16-217 Dry Cleaning:** The process used to remove soil, greases, paints, and other unwanted substances from materials with perchloroethylene or other synthetic solvents.
- 11-16-218 Dry Cleaning Equipment:** Any machine, device, or apparatus used to dry clean materials with solvent or to remove residual solvent from previously cleaned materials. Dry cleaning equipment may include, but is not limited to, a transfer machine (washer or reclaimer), a vented machine, a converted machine, a closed-loop machine, a secondary control machine, or a drying cabinet.
- 11-16-219 Dry Cleaning System:** All of the following equipment, devices, or apparatus associated with the solvent dry cleaning process: dry cleaning equipment; filter or purification systems; waste holding, treatment, or disposal systems; solvent supply systems; dip tanks; pumps; gaskets; piping, ducting, fittings, valves, or flanges that convey solvent-contaminated air; and control systems.
- 11-16-220 Drying Cabinet:** A housing in which materials previously dry-cleaned with solvent are placed to dry and which is used only to dry materials that would otherwise be damaged by the heat and tumbling action of the drying cycle.
- 11-16-221 Drying Cycle:** The process used to actively remove the solvent remaining in the materials after washing and extraction. For closed-loop machines, the heated portion of the cycle is followed by cool-down and may be extended beyond cool-down by the activation of a control system. The drying cycle begins when heating coils are activated and ends when the machine ceases rotation of the drum.
- 11-16-222 Drying Sensor/Controller:** A device that senses when the materials being cleaned are relatively dry and automatically controls the drying cycle. Drying sensor/controllers include but are not limited to infrared analyzers, float switches, and resistance probes. Near the end of cool-down, the drying sensor/controller detects a low concentration of solvent in the drying air or a relatively low solvent recovery rate and then extends the drying cycle for a preset time to ensure dry garments.
- 11-16-223 Drying Tumbler:** Dry cleaning equipment which dries articles previously cleaned with synthetic solvent. For purposes of this rule, drying tumblers include solvent reclaimers.
- 11-16-224 Dry-to-Dry Unit:** Dry cleaning equipment which combines the functions of cleaning and drying in one unit and where articles to be cleaned are placed in the equipment and not removed until the drying cycle is complete. A vented machine draws in fresh air during the deodorizing cycle to remove residual solvent. A closed-loop machine is not vented during any part of the drying cycle and must have a refrigerated condenser or other equivalent primary control device to effectively recover solvent and deodorize garments.
- 11-16-225 Environmental Training Program:** An initial course or a refresher course of the environmental training program for solvent dry cleaning operations that has been authorized by the Air Resources Board according to the requirements of 17 CCR, Section 93110.
- 11-16-226 Equivalent Closed-loop Vapor Recovery System:** A device or combination of devices that achieves, in practice, a solvent recovery performance equal to or exceeding that of refrigerated condensers.
- 11-16-227 Existing Facility:** Any facility, located within the District, in operation prior to October 1, 1994.
- 11-16-228 Existing Machine:** A dry cleaning machine in operation at an existing facility within the District prior to October 1, 1994.
- 11-16-229 Facility:** For the purposes of this rule, any entity or entities which own or operate solvent dry cleaning equipment, are owned or operated by the same person(s), and are located on the same parcel or contiguous parcels.
- 11-16-230 Facility Mileage:** The efficiency of solvent use at a facility, expressed as the pounds of materials cleaned per gallon of solvent used, and calculated for all dry cleaning machines at the facility over a specified time period.
- 11-16-231 Fugitive Control System:** A device or apparatus that collects fugitive solvent vapors from the machine door, button and lint traps, still, or other intentional openings of the dry cleaning system and routes those vapors to a device that reduces the mass of solvent prior to exhaust of the vapor to the atmosphere.
- 11-16-232 Full-time Employee:** Any person who is employed at the dry cleaning facility and averages at least 30 hours per week in any 90-day period.

- 11-16-233 Gallons of Solvent Used:** The volume of solvent, in gallons, introduced into the dry cleaning equipment, and not recovered at the facility for reuse on-site in the dry cleaning equipment, over a specified time period. Also known as "gross usage" or "solvent consumption".
- 11-16-234 Halogenated-hydrocarbon Detector:** A portable device capable of detecting vapor concentrations of perchloroethylene of 25 ppmv or less and indicating an increasing concentration by emitting an audible signal or visual indicator that varies as the concentration changes. Equivalent portable gas analyzers include but are not limited to flame ionization detectors, photo-ionization detectors, and infrared analyzers.
- 11-16-235 Liquid Leak:** A leak of liquid containing solvent of more than 1 drop every 3 minutes.
- 11-16-236 Major Facility (Title V):** For dry cleaning facilities only, pursuant to 40 CFR, Part 63, Subpart M, § 63.320 (g), a dry cleaning facility is a major facility if it emits or has the potential to emit more than 10 tons per year of perchloroethylene (or other hazardous air pollutant) to the atmosphere. In lieu of measuring a facility's potential to emit perchloroethylene emissions, a perchloroethylene dry cleaning facility is a major facility if:
- (1) it includes only dry-to-dry machines (s) and has a total yearly perchloroethylene consumption greater than 2,100 gallons as determined according to § 63.323 (d); or
 - (2) it includes only transfer machine system(s) or both dry-to-dry machine(s) and transfer machines system(s) and has a total yearly perchloroethylene consumption greater than 1,800 gallons as determined according to § 63.323 (d).
- 11-16-237 Materials:** Wearing apparel, draperies, linens, fabrics, textiles, rugs, leather, and other goods that are dry cleaned.
- 11-16-238 Muck Cooker:** A device for heating solvent-laden waste material to volatilize and recover solvent.
- 11-16-239 New Facility:** A facility that did not operate any dry cleaning equipment within the District prior to October 1, 1994. Relocation of existing equipment may be exempt from the secondary control requirement (subsection 302.1) if operated by the owner/operator of the previous facility.
- 11-16-240 Non-residential Facility:** Any dry cleaning facility that is not a co-residential facility
- 11-16-241 Pass-through Clean-room Garment Cleaner:** A machine used exclusively for cleaning of garments or other fabric articles that are worn for processes highly sensitive to contamination (e.g. semiconductor and pharmaceutical manufacturing). Venting of air is necessary to reduce redeposition of contaminants on the garments. Pass-through units have two doors; one door is used for loading while the other door opens into a clean-room to allow unloading without contamination.
- 11-16-242 Perceptible Vapor Leak:** An emission of solvent vapor from unintended openings in the dry cleaning system, as indicated by the odor of solvent or the detection of gas flow by passing the fingers over the surface of the system. This definition applies for an interim period until April 1, 1996.
- 11-16-243 Perchloroethylene (Perc):** The substance with the chemical formula C_2Cl_4 , also known by the name 'tetrachloroethylene', which has been identified by the Air Resources Board and listed as a toxic air contaminant in 17 CCR, Section 93000. Chemical Abstract Service (CAS) number 127184.
- 11-16-244 Pounds of Materials Cleaned Per Load:** The total dry weight, in pounds, of the materials in each load dry cleaned at the facility, as determined by weighing each load on a scale prior to dry cleaning and recording the value.
- 11-16-245 Portable Gas Analyzer:** Any hand carried instrument used to detect the concentration of hydrocarbons in air, includes but is not limited to gas chromatographs, flame ionization detectors, photo-ionization detectors, and infrared analyzers.
- 11-16-246 Primary Control System:** A refrigerated condenser, or an equivalent closed-loop vapor recovery system that meets the requirements of Regulation 2, Rule 1.
- 11-16-247 Reclaimer:** A machine, device, or apparatus used only to remove residual solvent from materials that have been previously cleaned in a separate piece of dry cleaning equipment.
- 11-16-248 Reasonably Available:** As it applies to an initial course for the environmental training program, means that the course is offered within 200 miles of the District boundaries and that all such courses have a capacity, in the aggregate, that is adequate to accommodate at least one person from each facility in the District required to certify a trained operator at that time.

- 11-16-249 Refrigerated Condenser:** A closed-loop vapor recovery system into which solvent vapors are introduced and trapped by cooling below the dew point of the solvent.
- 11-16-250 Relocated Facility:** Any non-residential facility with a closed-loop machine(s) or a previously converted vented machine(s) that had previously been used at an existing facility prior to October 1, 1994 and is owned and operated by the same owner/operator as the previous existing facility.
- 11-16-251 Secondary Control System:** A device or apparatus that reduces the concentration of solvent in the recirculating air at the end of the drying cycle beyond the level achievable with a refrigerated condenser alone. An "integral" secondary control system is designed and offered as an integral part of a production package with a single make and model of dry cleaning machine and primary control system. An "add-on" secondary control system is designed or offered as a separate retrofit system for use on multiple machine makes and models.
- 11-16-252 Secondary Control Machine:** A closed-loop dry cleaning machine that includes a secondary control system.
- 11-16-253 Self-service Dry Cleaning Machine:** A solvent dry cleaning machine that is loaded, activated, or unloaded by the customer.
- 11-16-254 Separator:** Any device used to recover solvent from a water-solvent mixture.
- 11-16-255 Still:** A device used to volatilize (distill) and recover solvent from contaminated solvent removed from the cleaned materials.
- 11-16-256 Synthetic Solvent or Solvent:** For the purpose of this rule only, any halogenated hydrocarbon including, but not limited to, tetrachloroethylene (perchloroethylene, Perc, or PCE); 1,1,1-trichloroethane (111-TCA); and trichlorotrifluoroethane (Valdene or CFC-113). Non-halogenated synthetic solvents are subject to Regulation 8, Rule 17, "Petroleum Dry Cleaning Operations". "Solvent" is used instead of "Synthetic Solvent" for the purposes of clarity in certain sections of this rule.
- 11-16-257 Tetrachloroethylene:** The substance with the chemical formula ' C_2Cl_4 ', also known by the name perchloroethylene, which has been identified by the Air Resources Board and listed as a toxic air contaminant in 17 CCR, Section 93000. Chemical Abstract Service (CAS) number 127184.
- 11-16-258 Trained Operator:** The owner, the operator, or an employee of the facility, who holds a record of completion for the initial course of an environmental training program and maintains her/his status by successfully completing the refresher courses as required.
- 11-16-259 Transfer Machine:** A combination of solvent dry cleaning equipment in which washing and extraction are performed in one unit and drying is performed in a separate unit (reclaimer).
- 11-16-260 Vapor Adsorber:** A bed of activated carbon or other adsorbent into which solvent vapors are introduced and trapped for subsequent desorption. Includes external adsorber ("sniffer"), secondary control system; or fugitive control system.
- 11-16-261 Vapor Barrier Room:** A room built with materials that are resistant to diffusion of solvent vapors and that totally encloses a dry cleaning machine in order to minimize the exposure to people who are co-located with a dry cleaning facility. An associated ventilation system exhausts fugitive emissions outside the building.
- 11-16-262 Vapor Leak:** An emission of synthetic solvent (perchloroethylene) vapor from unintended openings in the dry cleaning system, as indicated by a rapid audible signal or visual signal from a halogenated-hydrocarbon detector or a concentration of synthetic solvent (perchloroethylene) exceeding 50 ppmv as methane (25 ppmv as Perc) as indicated by a portable analyzer. This definition applies beginning April 1, 1996.
- 11-16-263 Vented Machine:** Dry cleaning equipment in which washing, extraction, and drying are all performed in the same single unit and in which fresh air is introduced into the drum in the last step of the drying cycle and exhausted to the atmosphere through a control device.
- 11-16-264 Waste From Dry Cleaning Operations:** For the purposes of this regulation only, any liquid or solid, recovered from dry cleaning operations, that contain more than 0.1% by weight of synthetic solvents. Water recovered from synthetic solvent operations that does not have a visible organic phase is not considered waste for the purposes of this regulation, but is defined as "waste water".
- 11-16-265 Waste Water Evaporator:** A device that vaporizes solvent-contaminated waste water through the addition of thermal or chemical energy, or through physical action.

11-16-266 Water-repellent Treatment: The treatment of materials with a water-repellent solution that contains solvent.

11-16-300 STANDARDS

11-16-301 Final Equipment Requirements, Existing Non-residential Facilities: Except as prohibited in Section 304, any person using synthetic solvent to dry clean materials in an existing non-residential facility shall use only the following equipment:

301.1 For an existing machine (operated prior to October 1, 1994):

301.1.1 A converted machine, or

301.1.2 A closed-loop machine, or

301.1.3 A secondary control machine, or

301.1.4 Until prohibited on October 1, 1998:

a. A vented machine, or

b. A transfer machine;

301.2 For a machine that replaces an existing machine:

301.2.1 A closed-loop machine, or

301.2.2 A secondary control machine;

301.3 For an additional machine (new installation; not replacing an existing machine):

301.3.1 A secondary control machine;

301.4 For any existing facility that requests an increase in permitted solvent usage for an existing machine or replacement machine:

301.4.1 A secondary control machine or

301.4.2 A closed-loop machine with a fugitive control system that meets the provisions of subsection 305.4;

301.5 Except as provided in subsections 301.5.1 and 301.5.2, in addition to the dry cleaning equipment above, a ventilation system that meets the requirements of subsection 307.2 and Regulation 2, Rule 1, Section 301 shall be installed and operated.

301.5.1 Subsection 301.5 shall be waived by APCO, for a facility subject to subsection 301.3 or 301.4, if the off-site cancer risk caused by the facility is less than 100 in a million and the increase in off-site cancer risk caused by an additional machine or an increase in permitted solvent usage is less than 10 in a million.

301.5.2 For a facility that is only subject to subsections 301.1 or 301.2: subsection 301.5 becomes effective on October 1, 1998 but shall be waived by APCO if the off-site cancer risk caused by the facility is less than 100 in a million.

301.5.3 A fugitive control system that meets the requirements of subsection 305.4 may be installed and operated as a component of the ventilation system to reduce risk, particularly for co-commercial facilities.

Risk shall be determined by procedures outlined in the District's Risk Management Policy for Dry Cleaners (Manual of Procedures, Volume II, Chapter 6, Appendix A).

11-16-302 Equipment Requirements, New Non-residential Facilities: Any person using synthetic solvent to dry clean materials in a new non-residential facility shall use only the following equipment:

302.1 A secondary control machine;

302.2 Except as provided in subsections 302.2.1, in addition to the dry cleaning equipment above, a ventilation system that meets the requirements of subsection 307.2 and Regulation 2, Rule 1, Section 301 shall be installed and operated.

302.2.1 Section 302.2 shall be waived by APCO if the off-site cancer risk caused by the facility is less than 10 in a million. Risk shall be determined by procedures outlined in the District's Risk Management Policy for Dry Cleaners (Manual of Procedures, Volume II, Chapter 6, Appendix A).

- 11-16-303 Final Equipment Requirements, Co-residential Facilities:** Any person using synthetic solvents to dry clean materials in a co-residential facility shall use only the following equipment:
- 303.1 For any new or replacement machine:
 - 303.1.1 A secondary control machine;
 - 303.2 For an existing machine:
 - 303.2.1 A secondary control machine, or
 - 303.2.2 A closed-loop machine with a fugitive control system, that meets the provisions of subsection 305.4, or
 - 303.2.3 Until prohibited on April 1, 1997:
 - a. A vented machine, or
 - b. A transfer machine, or
 - c. A converted machine, or
 - d. A closed-loop machine;
 - 303.3 Except as provided in subsection 303.3.1, in addition to the dry cleaning equipment above, a vapor barrier room and a ventilation system that meets the requirements of subsection 307.1 and Regulation 2, Rule 1, Section 301 shall be installed and operated.
 - 303.3.1 An existing facility shall not be subject to subsection 303.3 until April 1, 1997 unless the facility installs an additional machine or requests an increase in permitted solvent usage.
- 11-16-304 Prohibited Equipment / Operations:** Owner/operator shall not operate any dry cleaning equipment or perform any operations listed below after the applicable date:
- 304.1 Effective October 1, 1994: any washing, drying, or treatment (excluding pre-cleaning of spots) outside of approved equipment is prohibited.
 - 304.2 Effective October 1, 1994: any new installation of a vented machine or a transfer machine is prohibited.
 - 304.3 Effective December 21, 1994: a separate washer or drying tumbler used with dry-to-dry equipment is prohibited; wet materials shall not be transferred to or from dry-to-dry machines except from dip tanks or to a drying cabinet.
 - 304.4 Effective December 21, 1994: any self-service dry cleaning machine is prohibited.
 - 304.5 Effective April 1, 1996: conversion of any vented machine to a closed-loop system is prohibited.
 - 304.6 Effective April 1, 1997, for co-residential facilities: any vented machine, transfer machine, or closed-loop machine without a secondary control system or fugitive control system is prohibited.
 - 304.7 Effective October 1, 1998: any vented machine is prohibited.
 - 304.8 Effective October 1, 1998: any transfer machine is prohibited except a drying cabinet that meets the requirements of subsection 305.5.

11-16-305 Specifications for Required Equipment: Except as provided in Section 306, dry cleaning equipment shall meet following specifications:

305.1 A primary control system shall:

305.1.1 Operate during both the heated and cool-down phases of the drying cycle to reduce the mass of solvent in the recirculating air stream;

305.1.2 Not exhaust to the workroom or atmosphere except through a fugitive control system after the drying cycle is complete.

305.1.3 Not require the addition of any form of water to the primary control system that results in physical contact between the water and solvent;

305.1.4 For refrigerated condensers only:

a. Be capable of achieving an outlet vapor temperature, downstream of any bypass, of less than or equal to 45°F during cool-down; and

b. Have a temperature indicator (a thermocouple with a digital display, a graduated thermometer with a minimum range from 0°F to 150°F, or an equivalent temperature indicator) which measures the temperature of the outlet vapor stream, downstream of any bypass of the condenser, and is easily visible to the operator.

c. Closed-loop machines and converted machines that are installed or modified after December 21, 1994 shall have a drying sensor/controller that complies with subsection 309.1.1.b. This provision applies also to primary control systems on closed-loop machines equipped with secondary control; the drying sensor activates the secondary control system.

305.1.5 For equivalent closed-loop vapor recovery systems:

a. Use a technology that has been demonstrated, pursuant to the requirements of Section 502, to achieve a solvent concentration of 8,600 ppmv (measured as Perc) or less in each test and

b. Have a device that measures the solvent concentration, or a demonstrated surrogate parameter, in the drum at the end of each drying cycle, before the machine door is opened and any fugitive control system activates, and indicates if the concentration is above or below 8,600 ppmv (measured as Perc). This device shall be installed such that the reading is easily visible to the operator and shall control the drying cycle. This device shall be considered a drying sensor/controller that is subject to subsection 309.1.1.b.

305.2 A converted machine shall meet all of the following requirements upon conversion but no later than April 1, 1996:

305.2.1 All process vents that exhaust to the atmosphere or workroom during washing, extraction, or drying shall be sealed. Machines may be exhausted through a fugitive control system after the drying cycle is complete.

305.2.2 The converted machine shall use an appropriately sized primary control system to recover solvent vapor during the heated and cool-down phases of the drying cycle.

a. A refrigerated condenser shall be considered appropriately sized, for a machine converted on or after May 4, 1994, if all of the following conditions are met:

(1) The water-cooled condensing coils are replaced with refrigerant-cooled condensing coils.

(2) The compressor of the refrigerated condenser shall have a capacity, in horsepower (hp) that is no less than the minimum capacity, determined as follows:

$$\text{Minimum Capacity (hp)} = \frac{\text{Capacity of the Machine (lbs)}}{12}$$

b. A refrigerated condenser shall be considered appropriately sized, for a machine converted prior to May 4, 1994, if either of the conditions below are met:

- (1) The refrigerated condenser shall meet the specifications for new conversions in subsection 305.2.2.a or
 - (2) There shall be no reduction in the design air flow of the machine to the refrigerated condenser and the refrigerated condenser shall achieve, and maintain for 3 minutes, an outlet vapor temperature, measured downstream of the condenser and any bypass of the condenser, of less than or equal to 45°F within 10 minutes of the initiation of cool-down.
- c. An equivalent closed-loop vapor recovery system shall be appropriately sized for the conversion of a vented machine if the system does not extend the total drying time by more than five minutes to meet the specifications of subsection 305.1.5.
- 305.2.3 The converted machine shall operate with no liquid leaks and no vapor leaks. Any seal, gasket, or connection determined to have a liquid leak or vapor leak shall be replaced.
- 305.3 A secondary control system shall:
- 305.3.1 Be designed to function with a primary control system or be designed to function as a combined primary control system and secondary control system that meets all of the applicable requirements of this section;
 - 305.3.2 Not exhaust to the workroom or atmosphere except when also used as a fugitive control system (subject to subsection 305.4);
 - 305.3.3 Not require the addition of any form of water to the secondary control system that results in physical contact between the water and solvent;
 - 305.3.4 Use a technology that has been demonstrated, pursuant to the requirements of Section 502, to achieve a solvent concentration in the drum of 300 ppmv or less measured as Perc (600 ppmv as methane, C_1) in each test;
 - 305.3.5 Have a holding capacity equal to or greater than 200 percent of the maximum quantity of solvent vapor expected in the drum prior to activation of the system; and
 - 305.3.6 For add-on secondary control systems only, the system shall be sized and capable of reducing the solvent concentration in the drum from 8,600 ppmv or greater to 300 ppmv or less measured as Perc (600 ppmv as methane, C_1) in the maximum volume of recirculating air in the dry cleaning machine and all contiguous piping.
- 305.4 Ventilation of perchloroethylene laden air from the drum or other intended openings of a dry-cleaning machine is allowable only through a fugitive control system (or secondary control system also functioning as a fugitive control system) after the drying cycle is complete and prior to opening of the door or seal.
- 305.4.1 Except as required by subsection 305.4.2, emissions from any fugitive control system installed after December 21, 1994 shall be exhausted through a stack that extends a minimum of 5 feet above the roof of the building.
- 305.4.2 Only for machines subject to subsections 301.4.2, 301.5.3, 303.2.2, and 305.3.2, a fugitive control device shall:
- a. Operate a fan that produces a volumetric airflow of at least 100 actual cubic feet per minute (ACFM) for at least 10 seconds immediately prior to or as the loading door or seal is opened; or shall maintain the concentration of perchloroethylene at 25 ppmv or less when measured 6 inches from the center of the open loading door or seal;
 - b. Reduce the emissions of solvent in the exhaust air to a concentration less than 100 ppmv measured as Perc at the outlet;
 - c. Exhaust all emissions through a stack that extends a minimum of 5 feet above the roof of the building or any adjacent building, whichever is higher; and
 - d. Be operated, maintained, and regenerated according to manufacturers recommendations. Desorption or replacement of adsorption canisters shall be performed periodically, and at a minimum, shall be each time dry

cleaning equipment exhausted to the fugitive control system has operated the allowable number of loads for its rated capacity in accordance with the following formula:

$$\text{maximum loads per regeneration} = \frac{75 \times [\text{pounds of carbon in fugitive control system}]}{\text{rated capacity of dry cleaning machine (in pounds)}}$$

The APCO shall evaluate and approve alternative desorption/replacement schedules for other adsorbent materials. Desorption shall be performed with the minimum steam pressure (or hot air temperature) and air flow capacity specified by the manufacturer.

305.5 A drying cabinet shall be used only for delicate and specialty articles which are likely to be damaged when dried in converted or closed-loop machines and shall be fully enclosed and be exhausted via one of the following methods:

305.5.1 To a control system that achieves a solvent concentration of 100 ppmv or less in each test measured as Perc (200 ppmv as methane, C_1) at the outlet without dilution or

305.5.2 To a control system that reduces the concentration of solvent in a closed system with no exhaust to the atmosphere or workroom. This closed drying system shall meet the primary control provisions of subsection 305.1.

305.6 A pass-through, clean-room garment cleaner eligible for limited exemption by Section 106 shall be exhausted via a vapor adsorption system that achieves a solvent concentration of less than 100 ppmv, measured as methane, C_1 , (50 ppmv as Perc) at the outlet without dilution. The vapor adsorber shall be regenerated at least daily and shall be monitored daily (during deodorization of the last drying cycle prior to regeneration) with a colorimetric detector tube or a portable gas analyzer in accordance with subsection 309.1.5 to demonstrate compliance.

11-16-306 Specifications for Interim Equipment and Controls: Until the applicable prohibition provisions of Section 304, solvent emissions from vented machines and drying tumblers shall be abated by one of the following methods:

306.1 Exhausted through a vapor adsorber which reduces emissions of synthetic solvents to the atmosphere by at least 90 percent by weight or to a solvent concentration of less than 100 ppmv, measured as methane, C_1 , (50 ppmv as Perc) at the outlet without dilution or

306.2 Recirculated through a refrigerated condenser that:

306.2.1 Achieves an outlet vapor temperature, downstream of any bypass, of less than or equal to 45°F during cool-down ; and

306.2.2 Has a temperature indicator (a thermocouple with a digital display, a graduated thermometer with a minimum range from 0°F to 150°F, or an equivalent temperature indicator) which measures the temperature of the outlet vapor stream, downstream of any bypass of the condenser, and is easily visible to the operator.

11-16-307 Ventilation Requirements: Except as provided by subsections 301.5, 302.2, and 303.3, the following ventilation requirements shall be met:

307.1 Facilities Co-located with Residences: Any person that operates perchloroethylene (or other hazardous synthetic solvent) dry cleaning equipment in any co-residential facility shall install and operate a vapor barrier room and ventilation system in order to minimize exposure to affected residents. All dry cleaning machines and related equipment that may emit perchloroethylene (solvent) shall be totally enclosed within a vapor barrier room that:

307.1.1 Is properly constructed of approved diffusion resistant materials;

307.1.2 Is continuously exhausted with a ventilation fan(s) that

- a. Has a volumetric airflow of at least 1000 actual cubic feet per minute (ACFM),
- b. Produces an air change rate of at least one air change every five minutes, and
- c. Exhausts all emissions through a stack that extends a minimum of 5 feet above the roof of the residential building or any adjacent building, whichever is higher, and

307.1.3 Is maintained in good operating condition.

307.2 Non-residential Facilities: Any person that operates perchloroethylene (or other hazardous synthetic solvent) dry cleaning equipment in any non-residential facility shall install and operate a ventilation system in order to minimize exposure to off-site people. Emissions from dry cleaning machines and related equipment shall be captured and exhausted by a ventilation system that:

307.2.1 Includes shrouds, hoods, rooms, walls, flexible barriers (e.g. plastic sheeting), or other structures designed to capture fugitive emissions;

307.2.2 Is exhausted with a ventilation fan(s) that operates whenever the dry cleaning machines and related equipment are operated and:

- a. Has a volumetric airflow of at least 1000 actual cubic feet per minute (ACFM);
- b. Produces either:
 - (1) Capture velocities greater than 100 feet per minute at openings of the capture structures of subsection 307.2.1, or
 - (2) An air change rate of at least one air change every ten minutes of a working region that has air movement restricted by the structures in subsection 307.2.1, and
- c. Exhausts emissions through a stack that extends a minimum of 5 feet above the roof of the building or any adjacent building, whichever is higher, and

307.2.3 Is maintained in good operating condition.

11-16-308 Water-repellent Treatment and Dip Tank Operations: A person that performs water-repellent treatment or dip tank operations shall ensure that all of the following requirements are met:

308.1 All materials to be treated with solvent water-repelling solutions shall be treated in a closed-loop machine, a converted machine, or a dip tank. Open spraying of water-repelling solution containing more than 1 weight percent solvent is prohibited.

308.2 For dip tank operations:

308.2.1 The dip tank shall be fitted with a cover that prevents the escape of solvent vapors from the tank and shall remain covered at all times, except when materials are placed in and removed from the dip tank or while the basket is moved into position for draining.

308.2.2 After immersion, the materials shall be drained within the covered dip tank until dripping ceases.

308.2.3 All materials removed from a dip tank shall be immediately placed into a closed-loop machine or a converted machine for drying and not removed from the machine until the materials are dry.

11-16-309 Good Operating Practices: The owner/operator of any dry cleaning machine or related equipment shall ensure that all of the following requirements are met:

309.1 Operation and maintenance requirements: The trained operator, or his/her designee, shall operate and maintain all components of the dry cleaning system in accordance with the requirements of this section and the conditions specified in the facility's operating permit. For operations not specifically addressed, the components shall be operated and maintained in accordance with the manufacturer's recommendations. Each operation and maintenance function and the date performed shall be recorded on an operation and maintenance checklist.

309.1.1 Refrigerated condensers shall:

- a. Be operated to ensure that exhaust gases are recirculated until the air-vapor stream temperature on the outlet side of the refrigerated condenser, downstream of any bypass, is less than or equal to 45°F and
- b. For closed-loop machines and converted machines that are installed or modified after December 21, 1994: have a drying sensor/controller that is designed to extend the drying time at least 4 minutes beyond the point that solvent recovery rate is less than 40 ml/min or solvent vapor concentration in the drum is less than 8600 ppmv (measured as Perc). Drying sensors shall be maintained in good operating condition and properly operated at all times.

309.1.2 Primary control systems, other than refrigerated condensers, shall be operated to ensure that exhaust gases are recirculated until the solvent concentration in the drum is less than or equal to 8,600 ppmv (measured as Perc) at the end of the drying cycle, before the machine door is opened and any fugitive control system activates.

309.1.3 Vapor adsorbers used as a primary control system or secondary control system shall be operated to ensure that air and solvent vapors are recirculated at less than 45°F or at the temperature recommended by the manufacturer for optimum adsorption. These vapor adsorbers shall be desorbed according to manufacturers recommendations but not less frequently than minimum requirements of subsection 305.4.2.d. No solvent vapors shall be routed to the atmosphere during routine operation or desorption.

309.1.4 During the interim period until prohibitions of Section 304 and compliance with the requirements of sections 301 and 303, an existing facility with a transfer machine or a vented machine shall operate any existing vapor adsorber, which functions at the end of the drying cycle, to meet the following requirements:

- a. Emissions of synthetic solvents to the atmosphere shall be reduced by at least 90 percent by weight or to a solvent concentration of less than 100 ppmv, measured as methane, C_1 , (50 ppmv as Perc) at the outlet without dilution.
- b. Desorption shall be performed periodically. The frequency, at a minimum, shall be each time all dry cleaning equipment exhausted to the device has cleaned a total of three pounds of materials for each pound of activated carbon (or other adsorbent). Desorption shall be performed with the minimum steam pressure and air flow capacity specified by the manufacturer.
- c. Once desorption is complete, the adsorbent (carbon) bed shall be fully dried according to the manufacturer's instructions.
- d. No vented solvent vapors shall bypass the vapor adsorber to the atmosphere.

309.1.5 Effective April 1, 1996, the trained operator, or her/his designee, shall check for solvent breakthrough at the outlet of any vapor adsorption system (external vapor adsorber, secondary control system, and any fugitive control system subject to subsection 305.4.2) that exhausts to the atmosphere, at least on a weekly basis. The operator shall also perform a weekly check for fugitive

emissions from machines with fugitive control systems subject to subsection 305.4.2; the detector shall be held 6 inches from the center of an open loading door immediately upon opening the door and prior to unloading cleaned materials. The results of all checks shall be entered on an operation and maintenance checklist. The breakthrough check shall be performed while the vapors are venting to the vapor adsorption system at the end of the last drying cycle prior to a regular desorption using one of the following techniques:

- a. A colorimetric detector tube,
- b. A halogenated-hydrocarbon detector,
- c. A portable gas analyzer, or
- d. An alternative method approved by the APCO that meets provisions of Section 601.

309.1.6 Cartridge filters and adsorptive cartridge filters shall be handled using one of the following methods:

- a. Drained in the filter housing, before disposal, for no less than: 24 hours for cartridge filters and 48 hours for adsorptive cartridge filters. If the filters are then transferred to a separate device to further reduce the volume of solvent, this treatment shall be done in a system that routes any vapor to a primary control system, with no exhaust to the atmosphere or workroom.
- b. Dried, stripped, sparged, or otherwise treated, within the sealed filter housing, to reduce the volume of solvent contained in the filter.

309.1.7 A still, and any muck cooker, shall not exceed 75 percent of its capacity, or an alternative level recommended by the manufacturer. A still, and any muck cooker, shall cool to 100°F (38°C) or less before emptying or cleaning.

309.1.8 Button and lint traps shall be cleaned each working day and the lint placed in a tightly sealed container.

309.1.9 All parts of the dry cleaning system where solvent may be exposed to the atmosphere or workroom shall be kept closed at all times except when access is required for proper operation and maintenance.

309.1.10 Waste water evaporators shall be manually filled and operated to ensure that no visible liquid solvent or visible emulsion is allowed to vaporize. An evaporator shall be directly vented outside the facility unless a secondary phase separator and a liquid phase carbon adsorber are used to remove solvent from the waste water. A secondary phase separator shall be equipped with a sight gauge (or solvent detector/alarm) and a drain valve. Equipment shall be maintained according to manufacturer's recommendations. As an alternative to evaporation, waste water shall be properly stored and transported as hazardous waste in accordance with subsection 309.1.11.

309.1.11 All waste from dry cleaning operations including solvent still residue; filter waste; solvent-laden lint; and used filtration cartridges must be maintained and transported in sealed non-reactive containers and shall be treated or disposed of as set forth in California State law regarding hazardous waste disposal as described in Title 22, Division 4.5 of the California Code of Regulations.

309.2 Leak check and repair requirements: Effective December 21, 1994, the trained operator, or her/his designee, shall conduct and maintain an effective leak check monitoring and repair program. The facility shall use a leak inspection checklist that includes the following components: hose and pipe connections, unions, couplings, valves, door gaskets, filter head gaskets, pumps, solvent base tanks, solvent and waste storage containers, water separators, filter sludge recovery units or muck cookers, distillation units and condensers, diverter valves, lint basket, lint storage, and cartridge filter housings. The trained operator, or her/his designee, shall record the status of each component on the checklist.

309.2.1 Effective December 21, 1994 the trained operator, or her/his designee, shall inspect the dry cleaning system for liquid leaks and perceptible vapor leaks on a weekly basis.

309.2.2 Effective April 1, 1996, the trained operator, or her/his designee, shall inspect the dry cleaning system for vapor leaks (instead of perceptible leaks) on a weekly basis using one of the following techniques:

- a. A halogenated-hydrocarbon detector,
- b. A portable gas analyzer measuring 1 cm. away from the dry cleaning system according to ARB Test Method 21 (17 CCR, Section 94124), or
- c. An alternative method approved by the APCO that meets provisions of Section 601.

309.2.3 Any liquid leak, perceptible vapor leak, or vapor leak that has been detected by the operator shall be noted on the checklist and repaired according to the requirements of this section. If the leak is not repaired at the time of detection, the leaking component shall be physically marked or tagged in a manner that is readily observable by a District inspector.

309.2.4 Any liquid leak, perceptible vapor leak, or vapor leak detected by the District, which has not been so noted on the checklist and marked on the leaking component of the dry cleaning system, shall constitute a violation of this section. For enforcement purposes, the District shall identify the presence of a vapor leak by determining solvent concentration:

- a. With a portable analyzer measured 1 cm. away from the dry cleaning system according to ARB Test Method 21 (17 CCR, Section 94124) or
- b. By an alternative method approved by the APCO that meets provisions of Section 601.

309.2.5 Any liquid leak or vapor leak shall be repaired within 24 hours of detection.

- a. If repair parts are not available at the facility, the parts shall be ordered within two working days of detecting such a leak. Such repair parts shall be installed within five working days after receipt. A facility with a leak that has not been repaired by the end of the 15th working day after detection shall not operate the dry cleaning equipment, until the leak is repaired, without a leak-repair extension from the District.
- b. The APCO may grant a leak-repair extension to a facility, for a single period of 30 days or less, if the APCO makes these findings:
 - (1) The delay in repairing the leak could not have been avoided by action on the part of the facility.
 - (2) The facility used reasonable preventive measures and acted promptly to initiate the repair.
 - (3) The leak would not significantly increase Perc exposure near the facility.
 - (4) The facility is in compliance with all other requirements of this section and has a history of compliance.

11-16-310 Environmental Training Requirements: The facility shall have one or more trained operators beginning on April 1, 1996 for existing facilities or three months after commencement of operations for new facilities.

310.1 A trained operator shall be the owner, the operator, or another employee of the facility, who successfully completes the initial course of an environmental training program to become a trained operator. Evidence of successful completion of the initial course shall be the original certificate record of completion issued pursuant to 17 CCR, Section 93110. The trained operator shall be a full-time employee of the facility. Except for the provisions of subsection 310.3.2, one person cannot serve as the trained operator for two or more facilities simultaneously.

310.2 Each trained operator shall successfully complete the refresher course of an environmental training program at least once every three years. Evidence of successful completion of each refresher course shall be the date of the course and the instructor's signature on the original certificate record of completion.

310.3 If the facility has only one trained operator and the trained operator leaves the employ of the facility, the facility shall:

310.3.1 Clearly enter the departure date of the trained operator into the facility records.

310.3.2 Obtain certification for a replacement trained operator within 3 months, except that a trained operator who owns or manages multiple facilities may serve as the interim trained operator at two of those facilities simultaneously for a maximum period of 4 months, by which time each facility must have its own trained operator.

310.3.3 If the APCO determines that the initial course of an environmental training program is not reasonably available, the APCO may extend the certification period for a replacement trained operator until 1 month after the course is reasonably available.

11-16-400 ADMINISTRATIVE REQUIREMENTS

11-16-401 Initial Notification: The owner/operator shall provide the District with all of the following information, in writing by December 21, 1994 or prior to installation of any new machine:

401.1 The name(s) of the owner and operator of the facility,

401.2 The facility name and location,

401.3 Whether or not the facility is co-located with a residence or another commercial business,

401.4 The number, types, makes, models, and capacities of all dry cleaning equipment,

401.5 All control systems for each dry cleaning machine,

401.6 For existing facilities only, the volume (gallons) of solvent purchased by the facility; volume of solvent sent to waste recycler; and net amount of solvent emitted during the previous calendar year. Waste shall be itemized by the total amount of solvent in filter cartridges, still residue, and other waste materials recovered during the reporting period.

11-16-402 Annual Reporting: The owner/operator shall maintain an annual report. The facility owner or operator shall furnish this annual report (as a part of the permit update questionnaire) to the District by the date specified by the District. The annual report shall include all of the following:

402.1 A copy of the record of completion and the dates of employment for each trained operator.

402.2 The total of the pounds of materials cleaned in the reporting period.

402.3 The total volume (gallons) of solvent used for all solvent additions (or solvent consumption) in the reporting period. Records shall include inventory of solvent at start of reporting period, inventory of solvent at end of reporting period, and total purchases of solvent for the reporting period. Solvent consumption is amount of solvent purchased plus decrease in inventory (or minus increase in inventory).

- 402.4 The total amount of solvent in waste received by licensed waste hauler or recycler in the reporting period:
- 402.4.1 Report the amount of still residue and the fraction of solvent in still residue;
 - 402.4.2 Report the number of cartridge and adsorptive cartridge filters and the amount of solvent per filter cartridge;
 - 402.4.3 Report the amount of other waste and the fraction of solvent in other waste;
 - 402.4.4 The total amount of solvent in waste equals the solvent in still residue plus the solvent in filter cartridges plus the solvent in other waste,
- 402.5 The average facility mileage, determined from solvent consumption within the reporting period, as follows:

The Total Pounds of Materials Cleaned
The Total Gallons of Solvent Used

11-16-403 Compliance Schedule: Table 11-16-1 summarizes applicable compliance dates for this rule. New and replacement machines generally shall comply with final requirements upon commencement of operations. A facility shall comply with applicable provisions of this rule as follows:

- 403.1 Dates of compliance for equipment, operations, and maintenance:
- 403.1.1 December 21, 1994:
 - a. Submit initial notification form to District (Section 401),
 - b. Keep required records, retain for annual reporting (sections 501 and 402),
 - c. Conduct leak check and repair program; checklists (subsection 309.2)
 - d. Other good operating practices, maintenance checklists (Section 309)
 - e. Regularly desorb vapor adsorbers (subsection 309.1)
 - f. Water repelling requirements apply (Section 308).
 - 403.1.2 October 1, 1995, for vented machines at existing facilities (Section 301.1):
 - a. Declare option for conversion or replacement and
 - b. For conversions: submit a completed application for Authority to Construct.
 - 403.1.3 April 1, 1996:
 - a. Conversions for vented machine must be complete (subsections 301.1.1, 304.5, and 305.2);
 - b. Perform vapor leak checks and vapor adsorber breakthrough checks (subsections 305.6, 309.1.5 and 309.2.2); and
 - c. Environmental training requirements for existing facilities (Section 310).
 - 403.1.4 October 1, 1996: Submit a complete application for Authority to Construct for co-residential facilities (Section 303).
 - 403.1.5 April 1, 1997, for existing co-residential facilities:
 - a. Install/modify machines, ventilation, and vapor barrier rooms (Section 303 and subsection 307.1);
 - b. Fugitive control systems requirements (subsection 305.4).
 - 403.1.6 April 1, 1998, for vented machines and transfer machines to be replaced and ventilation systems at existing non-residential facilities: submit a complete application for Authority to Construct for new equipment.
 - 403.1.7 October 1, 1998:
 - a. All transfer machines and all vented machines shall be removed from service (Section 304).
 - b. Install/modify ventilation systems at existing non-residential facilities (subsections 301.5 and 307.2);
- 403.2 For compliance with Section 310, "Environmental Training Requirements", an alternative date of compliance shall apply if the District determines that the initial course of an environmental training program for solvent dry cleaning operations is not reasonably available.
- 403.2.1 For existing facilities in the District, if the initial course is not reasonably available by October 1, 1995, the alternative date of compliance for Section

310 shall be 6 months from the date the District determines that the initial course is reasonably available.

403.2.2 For each new facility in the District, if the initial course is not reasonably available within the period from 3 months prior to 2 months following commencement of operation, the alternative date of compliance for Section 310 only shall be 1 month from the date the District determines that the initial course is reasonably available.

11-16-500 MONITORING AND RECORDS

11-16-501 Recordkeeping: The owner/operator shall maintain records for the specified time period, beginning on December 21, 1994. These records, or copies thereof, shall be accessible at the facility at all times. All of the following records shall be retained for at least 2 years or until the next District inspection of the facility, whichever period is longer.

501.1 For each dry cleaning machine, a log showing the date and the pounds of materials cleaned per load.

501.2 Solvent consumption: Retain all purchase and delivery receipts for solvent. The total inventory of solvent on hand at a facility shall be recorded at the beginning and the end of the annual reporting period. For only those facilities with solvent tanks that are not directly filled by the solvent supplier upon delivery, the date(s) and gallons of solvent added to the solvent tank of each dry cleaning machine.

501.3 Waste Records: List the volume of waste recovered from solvent still or other cooker; the number and type of filter cartridges removed for disposal, the amount of other waste recovered; and the volume of water recovered and disposition (evaporation or disposal). Records must include dates of waste recovery, dates of filter changes, and hazardous waste disposal manifests (or cumulative annual statements from recycler/hauler).

501.4 The completed operation and maintenance checklists required by subsection 309.1 and the leak inspection checklists required by the subsection 309.2:

501.4.1 The operation and maintenance checklist shall include, at a minimum, the following requirements: temperature of chilled air at outlet of a refrigerated condenser; concentration of Perc (solvent) in the drum at end of drying cycle where monitoring is required; times/dates of desorption for any vapor adsorber; pounds of materials and number of loads cleaned between desorptions; and the results of the weekly breakthrough check for vapor adsorbers. The amount (dry weight in pounds) of activated carbon or other adsorbent material contained in the vapor adsorber shall be posted on the equipment or noted on the vapor adsorber operation records.

501.4.2 Records shall include dates of leak inspections performed; dates leaks were detected; description of leaks found: liquid leaks, perceptible vapor leaks, or vapor leaks; leaks that were not repaired at the time of detection, a record of the leaking component(s) of the dry cleaning system awaiting repair and the action(s) taken to complete the repair, and dates of final repair. The record shall include copies of purchase orders or other written records showing when the repair parts were ordered and/or service was requested.

501.5 For dry cleaning equipment installed after October 1, 1994, the manufacturer's operating manual for all components of the dry cleaning system including the abatement systems shall be retained for the life of the equipment.

501.6 The original record of completion for each trained operator shall be retained during the employment of that person. A copy of the record of completion shall be retained for an additional period of two years beyond the separation of that person from employment at the facility. The record shall clearly show the terms of employment for all trained operators.

11-16-502 Equipment Certification / Testing Requirements: For a given design, a single test program shall be conducted to meet the specifications for any secondary control system (subsection 305.3.4); any equivalent closed-loop recovery systems (subsections 305.1.5.a and 305.2.2.c);

and any vented drying cabinet (subsection 305.5.1). The person or organization conducting the test program shall prepare a written test plan that describes, in detail, the dry cleaning machine and control systems being tested, the test protocol, and the test method. The testing methods shall comply with procedures found in Title 17, California Code of Regulations, Section 93109 (h). All test plans and test results shall be made available to the District and the Executive Officer of the California Air Resources Board upon request and shall serve as certification material if standards required by this Rule are met.

11-16-600 MANUAL OF PROCEDURES

11-16-601 Determination of Compliance – Emissions: Compliance with subsections 305.4.2.a, 305.4.2.b, 305.5.1, 305.6, 306.1, 309.1.4.a, 309.1.5.c, 309.1.5.d, 309.2.2.b, 309.2.2.c, and 309.2.4 shall be determined using the following Test Methods or procedures:

601.1 The Manual of Procedures, Volume IV, ST-31, or

601.2 EPA Reference Method 18 or EPA Reference Method 21 (40 CFR Part 60, Appendix A); ARB Test Method 21 (17 CCR, Section 94124), or ARB Method 422 (17 CCR, Section 94132).

601.3 An alternative test method may be used on a case-by-case basis provided that written approval has been granted by the APCO. Such approval shall be based upon demonstrated equivalency to the required test procedure.

601.4 A source shall be considered in violation of this rule if the applicable concentration or control efficiency measured by any of the applicable referenced test methods violates any standard of this rule.

11-16-602 Determination of Compliance – Air Velocity, Volumetric Flowrate, and Air Change Rate: Compliance with subsections 305.4.2.a, 307.1.2, and 307.2.2 shall be determined using the following Test Methods or procedures:

602.1 Testing of Ventilation Systems (Section 9), Industrial Ventilation, A Manual of Recommended Practices, American Conference of Governmental Industrial Hygienists (Library of Congress # 62-12929),

602.2 The Manual of Procedures, Volume IV, ST-17, or

602.3 EPA Reference Method 2C (40 CFR Part 60, Appendix A).

602.4 An alternative test method may be used on a case-by-case basis provided that written approval has been granted by the APCO. Such approval shall be based upon demonstrated equivalency to the required test procedure.

602.5 A source shall be considered in violation of this rule if the applicable air velocity, volumetric flowrate, or air change rate measured by any of the applicable referenced test methods violates any standard of this rule.

11-16-603 Test Plans and Reports:

603.1 All test plans and protocols shall be submitted for approval to the District's Source Test Section at least 2 weeks prior to a test.

603.2 All test results and reports shall be submitted to the District's Source Test Section within 30 days of the testing period.

11-16-604 Analysis of Solvent Content of Water Repellent Solution and Other Liquid Materials: Samples of water repelling solution as specified in subsection 308.1, samples of waste or other liquid materials shall be analyzed as prescribed in the Manual of Procedures, Volume III, Method 37.

11-16-605 Determination of Cancer Risk: Determination of cancer risk for subsections 301.5 and 302.2.1 shall be conducted using the District's Risk Management Policy for Dry Cleaners (Manual of Procedures, Volume II, Chapter 6, Appendix A).

Table 11-16-1. Equipment Requirements and Dates of Compliance for Regulation 11, Rule 16

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8
Facility Type	Required Dry Cleaning Equipment	Equipment Required By:	Complete Application for Authority to Construct By:	Initial Notification By:	Record Keeping & Annual Reporting Starting:	Leak check & Repair; Operation & Maintenance Requirements Starting:	Environmental Training Requirements By:
Existing Non-residential Facility (Option 1)	Converted Closed-loop Machine, possible Ventilation & Fugitive Control*	April 1, 1996	October 1, 1995 (prior to construction)	December 21, 1994	December 21, 1994	December 21, 1994	April 1, 1996
Existing Non-residential Facility (Option 2)	Closed-loop Machine or secondary control, Possible Ventilation & Fugitive Control*	October 1, 1996	April 1, 1996 (prior to construction)	December 21, 1994	December 21, 1994	December 21, 1994	April 1, 1996
Relocated Non-residential Facility	Closed-loop or Converted Machine; Possible Ventilation & Fugitive Control*	Upon commencement of operation	Prior to construction	Upon application for Authority to Construct	Upon commencement of operation	Upon commencement of operation	Three months after commencement of operation
New Non-residential Facility	Closed-loop Machine with Secondary Control; Possible Ventilation & Fugitive Control*	Upon commencement of operation	Prior to construction	Upon application for Authority to Construct	Upon commencement of operation	Upon commencement of operation	Three months after commencement of operation
Existing Co-residential facility; closed-loop machine	Closed-loop Machine with choice of Secondary Control or Fugitive Control System; Vapor Barrier Room & Ventilation System;	April 1, 1997	October 1, 1996 (prior to construction)	December 21, 1994	December 21, 1994	December 21, 1994	April 1, 1996
Existing Co-residential facility; Non-closed-loop machine	Closed-loop Machine with Secondary Control; Vapor Barrier Room & Ventilation System	April 1, 1997	October 1, 1996 (prior to construction)	December 21, 1994	December 21, 1994	December 21, 1994	April 1, 1996
New Co-residential Facility	Closed-loop Machine with Secondary Control; Vapor Barrier Room & Ventilation System	Upon commencement of operation	Prior to construction	Upon application for Authority to Construct	Upon commencement of operation	Upon commencement of operation	Three months after commencement of operation

* Ventilation required unless risk is less than 10 in a million for new facility, relocated facility, additional machine, or increase in perc usage or 100 in a million for existing facility.

Fugitive control system possible risk reduction measure and optional component of ventilation system.

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE

RULE 1

KRAFT PULP MILLS

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REGULATION 12

MISCELLANEOUS STANDARDS OF PERFORMANCE

RULE 1

KRAFT PULP MILLS

12-1-100 GENERAL

12-1-101 Description: This Rule limits the emission of total reduced sulfur (TRS) from operations at kraft pulp mills. Meeting the limitations of this Rule shall not exempt the operation of a kraft pulp mill from other requirements of the District or California law. (Amended July 16, 1980)

12-1-102 Exemptions: The APCO will not consider periods of excess emissions reported under subsection 12-1-402.1 to be indicative of a violation provided that:

102.1 The TRS emissions do not exceed the allowable limits from recovery furnaces more than 1% of the total number of continuous 12-hour periods of operation possible in any calendar quarter, (excluding periods of shutdown, startup or malfunctions and periods when the facility is not operating), and

102.2 The APCO determines that the affected facility, including air pollution control equipment, is maintained and operating in a manner which is consistent with good air pollution control practice for minimizing emissions during periods of excess emissions. (Added July 16, 1980)

12-1-200 DEFINITIONS

12-1-201 Digester System: Each continuous digester or each batch digester used for cooking of wood in white liquor, and associated chip steamer(s) below tank(s), flash tanks(s) and condenser(s). (Added July 16, 1980)

12-1-202 Kraft Pulp Mill: Any stationary source which produces pulp from wood by cooking (digesting) wood chips in a water solution of sodium hydroxide and sodium sulfide (white liquor) at high temperature and pressure. Regeneration of the cooking chemicals through a recovery process is considered part of the kraft pulp mill. (Amended July 16, 1980)

12-1-203 Kraft Recovery Furnace: A furnace used to recover pulping chemicals consisting primarily of sodium and sulfur compounds by burning black liquor. (Amended July 16, 1980)

12-1-204 Lime Kiln: A unit used to calcine lime mud, which consists primarily of calcium carbonate, into quick lime which is calcium oxide. (Added July 16, 1980)

12-1-205 Multiple Effect Evaporator System: The multiple-effect evaporator(s) and associated condenser(s) and hotwell(s) used to concentrate the spent cooking liquid (black liquor) that is separated from the pulp. (Added July 16, 1980)

12-1-206 Smelt Dissolving Tank: A vessel used for dissolving the smelt collected from the recovery furnace. (Added July 16, 1980)

12-1-207 Total Reduced Sulfur (TRS): The sum of sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide, released during kraft pulping operations. (Amended July 16, 1980)

12-1-300 STANDARDS

- 12-1-301 Discharge From Kraft Recovery Furnaces:** A person shall not discharge from any kraft recovery furnace TRS in amounts exceeding 15 ppm (dry) as an average over the hours of operation in any operating day, or in amounts exceeding 40 ppm (dry) for more than 60 cumulative minutes in any operating day; or from all kraft recovery furnaces TRS in amounts exceeding 150 g per metric ton (0.3 lbs. per ton) of air dried, unbleached kraft pulp produced during an operating day.
- 12-1-302 Discharges From Smelt Dissolving Tanks:** A person shall not discharge from any smelt dissolving tank TRS exceeding .0084 g/kg (0.0168 lb/ton) black liquor solids (dry weight) averaged over a 12-hour period. (Added July 16, 1980)
- 12-1-303 Discharges From Lime Kilns:** A person shall not discharge from any lime kiln TRS in amounts exceeding 40 ppm (dry) averaged over any period of 50 consecutive minutes in any operating day; or TRS in amounts exceeding 75 g per metric ton (.15 lbs. per ton) of air-dried unbleached kraft pulp produced during an operating day.
- 303.1 Effective July 1, 1983, a person shall not discharge from any lime kiln TRS exceeding 20 ppm (dry) corrected to 10% oxygen averaged over a twelve-hour period. (Amended July 16, 1980)
- 12-1-304 Discharges From Digester Systems and Multiple Effect Evaporator Systems:** A person shall not discharge from any digester system or multiple effect evaporator system TRS in excess of 5 ppm on a dry basis, averaged over a 12-hour period, unless the following conditions are met:
- 304.1 The gases are combusted in a lime kiln subject to the provisions of Section 12-1-303 of this rule. (Added July 16, 1980)
- 12-1-305 Discharges From Other Sources:** A person shall not discharge from any sources other than those specified in Sections 12-1-301 through 12-1-304 TRS exceeding 15 ppm (dry) averaged over a period of 30 consecutive minutes (Amended July 16, 1980)

12-1-400 ADMINISTRATIVE REQUIREMENTS

- 12-1-401 Schedule of Compliance for Lime Kilns:**
- 401.1 By January 1, 1981, submit to the APCO a final control plan describing the steps and time schedule to be followed to achieve compliance with subsection 12-1-301.1
- 401.2 By July 1, 1981, submit an application to the APCO for authority to construct.
- 401.3 By January 1, 1983, complete on-site construction or installation of emission control equipment.
- 401.4 By July 1, 1983, be in final compliance with subsection 12-1-302.1. (Added July 16, 1980)
- 12-1-402 Reports of Excessive Emissions:** For the purpose of reports required, the procedure will be as follows:
- 402.1 Emissions From Recovery Furnaces: TRS concentrations above 15 ppm by volume from straight recovery furnaces averaged over an operating day.
- 402.2 Emissions From Lime Kilns: All 60 minute periods during which TRS concentrations exceed 40 ppm, and all periods during which TRS emissions exceed 0.15 lbs. per ton of pulp produced. After July 1, 1983, only TRS concentrations which exceed 20 ppm averaged over an operating day will be reported. (Added July 16, 1980)

12-1-500 MONITORING AND RECORDS

12-1-501 Monitoring: The person responsible for emissions from any kraft pulp mill shall provide, install, maintain and continuously operate analytical instruments approved by the APCO to monitor TRS emissions from each kraft recovery furnace and each lime kiln.

12-1-502 Record Maintenance for Two Years: Monitoring records of the equipment required by Section 12-1-501 shall be kept for a period of two years and shall be made available to the APCO upon request. (Added July 16, 1980)

12-1-503 Monthly Summary: The persons responsible for emissions being monitored pursuant to Section 12-1-501 shall provide in such form as prescribed by the APCO a summary of data obtained during each calendar month, as specified in the Manual of Procedures (Added July 16, 1980)

12-1-600 MANUAL OF PROCEDURES

12-1-601 Testing: Emissions shall be tested according to methods outlined in the Manual of Procedures (Added July 16, 1980)

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
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REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 2
RENDERING PLANTS

12-2-100 GENERAL

12-2-101 Description: This Rule applies to plants whose purpose is the reduction of animal matter, commonly referred to as rendering plants.

12-2-200 DEFINITIONS

12-2-201 Reduction: Any heated process including rendering, cooking, drying, dehydrating, digesting, evaporating and protein concentrations.

12-2-300 STANDARDS

12-2-301 Processing of Gases: A person shall not reduce animal matter unless all gases, vapors and gas-entrained effluents are incinerated at a temperature of not less than 650°C (1202°F) for a period of not less than 0.3 seconds; or processed in a manner which is equally or more effective for the purpose of air pollution odor control, as determined by the APCO.

12-2-500 MONITORING AND RECORDS

12-2-501 Monitoring: A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this Rule shall provide, install, calibrate and maintain in good working order, devices for indicating temperature, pressure or other operating conditions, as specified by the APCO.

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
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REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 3
ASPHALT AIR BLOWING

12-3-100 GENERAL

12-3-101 Description: This Rule applies to operations involving the air blowing of asphalt.

12-3-300 STANDARDS

12-3-301 Processing of Gases: A person shall not engage in the air blowing of asphalt unless all gases, vapors and gas-entrained effluents are incinerated at temperatures of not less than 650°C (1202°F) for a period of not less than 0.3 seconds; or processed in a manner which is equally or more effective for the purpose of air pollution odor control as determined by the APCO.

12-3-500 MONITORING AND RECORDS

12-3-501 Monitoring: A person incinerating or processing gases, vapors or gas-entrained effluents pursuant to this Rule shall provide, install, calibrate and maintain in good working order devices for indicating temperature, pressure or other operating conditions, as specified by the APCO.

REGULATION 12

MISCELLANEOUS STANDARDS OF PERFORMANCE

RULE 4

SANDBLASTING

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REGULATION 12

MISCELLANEOUS STANDARDS OF PERFORMANCE

RULE 4

SANDBLASTING

12-4-100 GENERAL

12-4-101 Description: The standards in this Rule are uniform throughout the State and apply to sandblasting operations other than permanent abrasive blasting operations or equipment. Visible emissions from permanent operations or equipment are controlled by Regulation 6.

12-4-102 Multiple Nozzles: Emissions from unconfined blasting employing multiple nozzles shall be judged as a single source unless it can be demonstrated by the owner or operator that each nozzle, evaluated separately, meets the emission and performance standards provided for in this Rule.

12-4-200 DEFINITIONS

12-4-201 Abrasives: Any material used in abrasive blasting operations including but not limited to sand, slag, steel shot, garnet or walnut shells.

12-4-202 Abrasive Blasting: The operations of cleaning or preparing a surface by forcibly propelling a stream of abrasive material against the surface.

12-4-203 Abrasive Blasting Equipment: Any equipment utilized in abrasive blasting operations.

12-4-204 Confined Blasting: Any abrasive blasting conducted in an enclosure which significantly restricts air contaminants from being emitted to the ambient atmosphere, including but not limited to shrouding, tanks, drydocks, buildings and structures.

12-4-205 Hydroblasting: Any abrasive blasting using high pressure liquid as the propelling force.

12-4-206 Multiple Nozzles: More than one nozzle being used to abrasive blast the same surface in such close proximity that their separate plumes are indistinguishable.

12-4-207 Permanent Abrasive Blasting Operations or Equipment: Abrasive blasting operations conducted, or abrasive blasting equipment located in a building which is used in whole or in part for abrasive blasting operations.

12-4-208 Sandblasting: Abrasive blasting.

12-4-209 Source: The impact surface from any single abrasive blasting nozzle.

12-4-210 Unconfined Blasting: Any abrasive blasting which does not conform with Sections 12-4-204 and 207.

12-4-211 Vacuum Blasting: Any abrasive blasting in which the spent abrasive and surface material is immediately collected by a vacuum device.

12-4-212 Wet Abrasive Blasting: Any abrasive blasting using compressed air as the propelling force, which in the judgement of the APCO uses an amount of water adequate to minimize the plume.

12-4-213 Brushoff Blasting: A method of cleanup performed in order to achieve surface uniformity or impurity removal after wet blasting, hydroblasting, or vacuum blasting operations.

(Adopted July 11, 1990)

- 12-4-214 Steel or Iron Shot/grit:** Abrasives which meet either the Society of Automotive Engineers (SAE) recommended practices J827 and J444 or Steel Founders' Society of America Standards 21-68 or 20T-66, as those practices and standards existed on February 24, 1984. (Adopted July 11, 1990)
- 12-4-300 STANDARDS**
- 12-4-301 Ringelmann 1 Limitations:** Except as provided in Section 12-4-302 a person shall not discharge from any abrasive blasting, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than No. 1 on the Ringelmann Chart. This section will apply if the applicable standards in sections 12-4-303 through 309 are not met. (Amended July 11, 1990)
- 12-4-302 Ringelmann 2 Limitations:** A person shall not discharge from any abrasive blasting, if he complies with applicable standards in Section 12-4-303 and Sections 12-4-305 through 307, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker than No. 2 on the Ringelmann Chart.
- 12-4-303 Performance Standards For Abrasive Blasting For Traffic Markers:** Surface preparation for raised traffic delineating markers and pavement marking removal using abrasive blasting shall comply with at least one of the following performance standards:
- 303.1 Wet abrasive blasting, hydroblasting or vacuum blasting shall be used.
 - 303.2 Dry unconfined abrasive blasting for removal or surface preparation for immediate application of pavement markings of less than 93 m² (1,000 ft.²), or for surface preparation for raised traffic delineating markers shall use abrasives as defined in Sections 12-4-305 through 307.
- 12-4-304 Performance Standards For Other Abrasive Blasting:** Any abrasive blasting operation except as provided for in Section 12-4-303 and 305 through 309 shall comply with at least one of the following performance standards.
- 304.1 Confined blasting shall be used.
 - 304.2 Wet abrasive blasting shall be used.
 - 304.3 Hydroblasting shall be used.
 - 304.4 Dry unconfined blasting shall use abrasives as defined in Sections 12-4-305 through 307. (Amended July 11, 1990)
- 12-4-305 Performance Standards For Abrasives:** All abrasives used for dry unconfined blasting shall comply with the following performance standards:
- 305.1 Before blasting, the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve when tested in accordance with "Method of Test for Abrasive Media Evaluation," Test Method No. California 371-A. Certified abrasives re-used for dry unconfined blasting must conform with Section 12-4-305.1.
 - 305.2 After blasting, the abrasive shall not contain more than 1.8% by weight material five micron or smaller when tested in accordance with "Method of Test for Abrasive Media Evaluation", Test Method No. California 371-A. Certified abrasives re-used for dry unconfined blasting are exempt from Section 12-4-305.2
- 12-4-306 Certification of Abrasives:** A person shall not conduct dry unconfined blasting unless the abrasive(s) used in such operation have been certified by the ARB, on at least an annual basis, to comply with the performance standards set forth in Section 12-4-305. Any person who desires certification of an abrasive shall furnish to the ARB an adequate test sample, together with fees to defray the cost of testing. The ARB maintains an up-to-date list of certified abrasives.

12-4-307 Abrasive Labeling by Suppliers: All manufacturers and suppliers of abrasives certified for dry unconfined abrasive blasting shall legibly and permanently label the invoice, bill of lading and abrasive packaging or container with the following statement: "ARB certified for dry unconfined blasting."

12-4-308 Facility Blasting Operations: Confined blasting shall be used for all abrasive blasting operations at a facility except under the following conditions:

308.1 When steel or iron shot/grit is used;

308.2 When the item to be blasted exceeds 8 feet in height, 8 feet in width, or 10 feet in length;

308.3 When the structure or surface is blasted at its permanent or ordinary location.

(Adopted July 11, 1990)

12-4-309 Stucco and Concrete: Abrasive blasting of stucco and concrete shall be performed by wet blasting, hydroblasting, or vacuum blasting with the following exceptions, for which dry blasting may be used:

309.1 Window and door returns and frames;

309.2 Eaves, overhangs and ceilings;

309.3 Brush off blasting except for stucco surfaces;

309.4 Completely shrouded structures and blast areas that effectively control emissions;

309.5 Abrasive cleaning operations other than aggregate exposure or paint removal related to new concrete construction or repair activity if such operations are performed onsite.

(Adopted July 11, 1990)

12-4-600 MANUAL OF PROCEDURES

12-4-601 The MOP contains procedures for appraising visible emissions.

(Adopted July 11, 1990)

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 5
PHOSPHATE FERTILIZER PLANTS

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REGULATION 12

MISCELLANEOUS STANDARDS OF PERFORMANCE

RULE 5

PHOSPHATE FERTILIZER PLANTS

12-5-100 GENERAL

12-5-101 Description: The purpose of this Rule is to limit the emissions of fluorides from the following plants and facilities: granular triple superphosphate storage facilities; wet-process phosphoric acid plants; superphosphoric acid plants, including any combination of reactors, granulators, dryers, coolers, screens and mills; and triple superphosphate plants.

12-5-200 DEFINITIONS

12-5-201 Equivalent P_2O_5 Feed: The quantity of phosphorous, expressed as phosphorous pentoxide as determined by the method specified in 60.204 (d) (2) 40 CFR part 60, fed to the process.

12-5-202 Fresh Granular Triple Superphosphate: Granular triple superphosphate produced no more than 10 days prior to the date of a performance test.

12-5-203 Granular Diammonium Phosphate Plant: Any plant manufacturing granular diammonium phosphate by reacting phosphoric acid with ammonia.

12-5-204 Granular Triple Superphosphate Storage Facilities: Any plant curing or storing granular triple superphosphate, including any combination of storage or curing piles, conveyors, elevators, screens and mills.

12-5-205 Run-of-pile Triple Superphosphate: Any triple superphosphate that has not been processed in a granulator and is composed of particles at least 25% by weight which (when not caked) will pass through a 16 mesh screen.

12-5-206 Superphosphoric Acid Plant: Any plant which concentrates wet process phosphoric acid to 66% or greater P_2O_5 content by weight for eventual consumption as a fertilizer, including any combination of evaporators, hotwells, acid sumps, and cooling tanks.

12-5-207 Total Fluorides: Elemental fluorine and all fluoride compounds.

12-5-208 Triple Superphosphate Plant: Any plant manufacturing triple superphosphate by reacting phosphate rock with phosphoric acid, including any combination of mixers, curing belts (dens), reactors, granulators, dryers, cookers, screens and mills, and storage facilities for run-f-pile triple superphosphate.

12-5-209 Wet Process Phosphoric Acid Plant: Any plant manufacturing phosphoric acid by reacting phosphate rock with acid, including any combination of reactors, filters, evaporators and hotwells.

12-5-300 STANDARDS

12-5-301 Fluoride Emissions: A person shall not emit gases which contain total fluorides in the following amounts from the following plants and facilities.

301.1 In excess of 0.25 g/hr/metric ton (5.0×10^{-4} lb/hr/T) of equivalent P_2O_5 stored from granular triple superphosphate storage facilities.

301.2 In excess of 10.0 g/metric ton (0.02 lb/T) of equivalent P_2O_5 feed from wet-process phosphoric acid plants.

- 301.3 In excess of 5.0 g/metric ton (0.1 lb) of equivalent P_2O_5 feed, from superphosphoric acid plants.
- 301.4 In excess of 30.0 g/metric ton (0.06 lb/T) of equivalent P_2O_5 feed, from diammonium phosphate plants.
- 301.5 In excess of 100 g/metric ton (0.20 lb/T) of equivalent P_2O_5 feed, from triple superphosphate plants.

12-5-500 MONITORING AND RECORDS

12-5-501 Processing Plants: Persons who operate processing plants subject to this Rule shall do the following:

- 501.1 Install, calibrate, maintain, and operate a flow monitoring device which can be used to determine the mass flow of phosphorous-bearing feed material to the process. The monitoring device shall have an accuracy of $\pm 5\%$ over its operating range.
- 501.2 Maintain a daily record of equivalent P_2O_5 feed by multiplying the total mass flow rate in metric ton/hr. of phosphorous-bearing feed times the percentage of P_2O_5 content.
- 501.3 Install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the process scrubbing system. The monitoring device shall have an accuracy of $\pm 5\%$ over its operating range.

12-5-502 Storage Facilities: Persons operating granular triple superphosphate storage facilities shall do the following:

- 502.1 Maintain an accurate account of triple superphosphate in storage to permit the determination of the amount of equivalent P_2O_5 stored.
- 502.2 Maintain a daily record of total equivalent P_2O_5 stored by multiplying the percentage P_2O_5 content times the total mass of granular triple superphosphate stored.
- 502.3 Install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the process scrubbing system. The monitoring device shall have an accuracy of ± 5 percent over its operating range.

12-5-600 MANUAL OF PROCEDURES

12-5-601 Testing Procedures: The testing procedures for this Rule are not included in the Manual of Procedures. Emissions subject to the requirements of Section 12-5-301.1 shall be tested according to the method specified in 40 CFR 60.244, or equivalent. Emissions subject to the requirements of Section 12-5-301.5 shall be tested according to the method specified in 40 CFR 60.204, or equivalent.

REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE

RULE 6

ACID MIST FROM SULFURIC ACID PLANTS

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12-6-301 Acid Mist

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12-6-501 Production Rate and Hours of Operation

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12-6-601 Testing Procedures

REGULATION 12

MISCELLANEOUS STANDARDS OF PERFORMANCE

RULE 6

ACID MIST FROM SULFURIC ACID PLANTS

12-6-100 GENERAL

12-6-101 Description: The purpose of this Rule is to limit the emission of sulfuric acid mist from sulfuric acid production units, the construction, modification or reconstruction of which commenced on or before August 17, 1971.

12-6-200 DEFINITIONS

12-6-201 Acid Mist: Sulfuric acid mist as measured by test method outlined in 40 CFR 60.85.

12-6-202 Sulfuric Acid Production Unit: A plant producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, organic sulfide and mercaptans or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions of sulfur dioxide or other sulfur compounds.

12-6-300 STANDARDS

12-6-301 Acid Mist: On or after December 6, 1978, a person shall not emit from a sulfuric acid production unit gases which contain acid mist expressed as H_2SO_4 in excess of 0.15 g per kg (0.3 lb/T) of acid produced.

12-6-500 MONITORING AND RECORDS

12-6-501 Production Rate and Hours of Operation: A person subject to this Rule shall record on a daily basis the production rate and hours of operation of the sulfuric acid production unit.

12-6-600 MANUAL OF PROCEDURES

12-6-601 Testing Procedures: Emissions subject to the limitation of Section 12-6-301 shall be tested according to the method specified in Method 8 of Appendix A to 40 CFR 60.

REGULATION 12
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REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 7
MOTOR VEHICLE AIR CONDITIONER REFRIGERANT

(Adopted June 17, 1992)

The provisions of Title 40 of the Code of Federal Regulations Part 82 (40 CFR 82) subpart B are made part of the Rules and Regulations of the Bay Area Air Quality Management District.

Subpart B of 40 CFR 82 is amended to include the following additional standards:

Section 301: Prohibition of Service

No person shall add refrigerant to any motor vehicle air conditioning system unless that system has no detectable leaks as determined by the following procedure:

- 301.1 The system shall first be inspected for visible evidence of leakage.
- 301.2 The system shall then be tested for leakage using an electronic halogen detector used in accordance with the manufacturer's specifications. The system may be charged with only enough refrigerant to detect a leak. Refrigerant added for leak detection must be removed before any repair to the system is made.
- 301.3 Effective one year from promulgation of these specifications, electronic leak detectors shall meet the Society of Automotive Engineers (SAE) Specification J 1627 and shall be used in accordance with the Society of Automotive Engineers (SAE) Specification J 1628.
- 301.4 The APCO may approve an alternative method of leak detection. Alternative methods may be approved based on efficacy of leak detection and non-contamination of refrigerant.

Section 302: Prohibition of Use

No person shall operate recovery, recycling or charging equipment unless that equipment has no detectable leaks as determined by an electronic halogen detector used in accordance with the manufacturer's specifications. Effective one year from the promulgation of these specifications, electronic leak detectors shall meet the Society of Automotive Engineers (SAE) Specification J 1627.

Section 303: Prohibition of Sale

The provisions of 40 CFR 82 subpart B, section 82.34, shall be amended to include sales or distribution of refrigerant in containers of any size.

Section 304: Auto Dismantlers

Until such time as the provisions of section 608 of the Clean Air Act are promulgated into 40 CFR 82 the provisions of 40 CFR 82 subpart B, section 82.34, 82.36, 82.40, and 82.42 (a) and (b) 2, 4, 7 and 8 shall apply to any person salvaging or dismantling motor vehicles.

**REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
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OLEUM TRANSFER OPERATIONS**

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REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 10
OLEUM TRANSFER OPERATIONS
(Adopted August 3, 1994)

12-10-100 GENERAL

12-10-101 Description: The purpose of this Rule is to prevent releases of oleum from tank truck and railroad tankcar transfer operations that impact the public.

12-10-200 DEFINITIONS

12-10-201 Equipment: The implements used in an operation or activity including, but not limited to valves, pumps, compressors, connectors, hoses, piping, pressure relief devices, storage tanks, loading equipment, tank trucks, railroad tankcars and storage containers.

12-10-202 Failure Event: Any release of oleum associated with the use of a piece of equipment or human error which may expose the public to sulfuric acid and sulfur trioxide (combined) in excess of 0.01 grams per cubic meter or 2 parts per million calculated as H_2SO_4 averaged over any 10 consecutive minutes.

12-10-203 Management of Change Procedure: Written procedures which detail the review and approval process that must be followed to change the Oleum Transfer Procedure or the Oleum Transfer Checklist.

12-10-204 Monitoring Systems: Systems designed to detect emissions from equipment. Monitoring systems include, but are not limited to attended operation, remote viewing, remote detection or other methods that facilitate quick detection and mitigation response.

12-10-205 Oleum: Fuming sulfuric acid (H_2SO_4 with any dissolved SO_3).

12-10-206 Oleum Transfer Facility: An operation that loads or unloads oleum into or out of tank trucks or railroad tankcars.

12-10-207 Oleum Transfer Checklist: A written detailed step by step procedure for an oleum transfer which must be used by a Qualified Operator when transferring oleum. The checklist must provide for a method that will verify completion of each step in the transfer procedure.

12-10-208 Oleum Transfer Procedure: Written procedures detailing an oleum transfer operation that meets the requirements of Section 12-10-401.

12-10-209 Prevention Measure: A component, system or program that will prevent a Failure Event. Examples of Prevention Measures include, but are not limited to: flow, level and pressure indicators with interlocks, deadman switches, monitoring systems, deluge systems, documented and verified routine inspection and maintenance programs specified in detail by the Oleum Transfer Procedure and secondary containment and control equipment. Operator training and documented and verified routine inspection and maintenance programs specified in detail by the Oleum Transfer Procedure, collectively, may count as only one of the 3 Prevention Measures required by Section 12-10-401.3. A component, system or program with a high probability for failure shall not be considered a Prevention Measure.

12-10-210 Process Hazards Analysis: The systematic method for reducing the likelihood for a release, and for identifying conditions, component failures and human errors which may result in an emission to the atmosphere. As part of the Process Hazards Analysis, methods for reducing the likelihood for a release include an inherent safety review of the operation, which considers minimizing the transfer of oleum and process modifications.

- 12-10-211 Qualified Operator:** A person who is trained to conduct an oleum transfer as provided in the Oleum Transfer Procedure.
- 12-10-212 Qualified Person:** An APCO approved person who is qualified to attest to the validity of the Oleum Transfer Procedure and who is an independent registered professional engineer in the State of California with expertise in chemical, mechanical or safety engineering. An independent registered engineer is a person who does not work at the facility and is not involved in the design or operation of the facility.
- 12-10-213 Responsible Manager:** A person who is an employee of the facility or corporation, who possesses sufficient corporate authority and who is responsible for the management of the facility.
- 12-10-214 Secondary Containment:** A system designed to contain and control the sudden release of oleum such that any release does not expose the public to sulfuric acid and sulfur trioxide (combined) in excess of 0.01 grams per cubic meter or 2 parts per million calculated as H_2SO_4 averaged over any 10 consecutive minutes.

12-10-300 STANDARDS

- 12-10-301 Operating Requirements:** Effective July 1, 1995, any person operating an Oleum Transfer Facility shall meet the following conditions:
- 301.1** All oleum transfers shall be conducted in strict accordance with the facility's Oleum Transfer Procedure as defined in Section 12-10-208 and specified and reviewed under Section 12-10-401;
 - 301.2** A Qualified Operator as defined in Section 12-10-211 shall conduct the transfer;
 - 301.3** An Oleum Transfer Checklist as defined in Section 12-10-207 shall be completed for each transfer and signed by the Qualified Operator upon completion of the transfer; and
- 12-10-302 Secondary Containment Requirement:** Effective August 1, 1996, any person operating an Oleum Transfer Facility shall vent all pressure relief devices to a Secondary Containment system as defined in Section 12-10-214. In lieu of controlling any pressure relief device on a tank truck or railroad tankcar, an additional pressure relief device may be installed on the vent line to the tank truck or railroad tankcar. This additional pressure relief device shall be vented to a Secondary Containment system as defined in Section 12-10-214 and shall be designed to relieve at less than 80 percent of the set point of the tank truck or railroad tankcar pressure relief device.

12-10-400 ADMINISTRATIVE REQUIREMENTS

- 12-10-401 Oleum Transfer Procedure Requirements:** The Oleum Transfer Procedure shall meet the following requirements:
- 401.1** Explicitly establish training, equipment, inspection, maintenance and monitoring levels such that the Oleum Transfer Facility shall not expose the public to sulfuric acid and sulfur trioxide (combined) in excess of 0.01 grams per cubic meter or 2 parts per million calculated as H_2SO_4 averaged over any 10 consecutive minutes;
 - 401.2** Provide a detailed step by step procedure for the transfer;
 - 401.3** Using a Process Hazards Analysis, predict, plan and implement at least 3 consecutive Prevention Measures for every predicted Failure Event before any oleum release can occur that will expose the public to sulfuric acid and sulfur trioxide (combined) in excess of 0.01 grams per cubic meter or 2 parts per million calculated as H_2SO_4 averaged over any 10 consecutive minutes;

- 401.4 Provide an Oleum Transfer Checklist as defined in Section 12-10-207;
- 401.5 Provide a Management of Change Procedure, as defined in Section 12-10-203, that details the approval process that must be followed to change the Oleum Transfer Procedure or the Oleum Transfer Checklist;
- 401.6 Provide a program to train Qualified Operators as defined in Section 12-10-211;
- 401.7 Must be approved and signed by a Qualified Person and a Responsible Manager; and
- 401.8 Must be approved by the APCO to meet the requirements of Subsection 12-10-401.1 through 401.7. The APCO shall provide a 30 day public comment period and will consider all comments received during this period prior to approval of the procedure.

12-10-500 MONITORING AND RECORDS

- 12-10-501 Records:** Oleum Transfer Checklists for each transfer shall be retained for at least 4 consecutive quarters.

**REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 11
FLARE MONITORING AT PETROLEUM REFINERIES**

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REGULATION 12
MISCELLANEOUS STANDARDS OF PERFORMANCE
RULE 11
FLARE MONITORING AT PETROLEUM REFINERIES

(Adopted June 4, 2003)

12-11-100 GENERAL

- 12-11-101 Description:** The purpose of this rule is to require monitoring and recording of emission data for flares at petroleum refineries.
- 12-11-110 Exemption, Organic Liquid Storage and Distribution:** The provisions of this rule shall not apply to flares or thermal oxidizers used to control emissions exclusively from organic liquid storage vessels subject to Regulation 8, Rule 5 or exclusively from loading racks subject to Regulation 8 Rules 6, 33, or 39.
- 12-11-111 Exemption, Marine Vessel Loading Terminals:** The provisions of this rule shall not apply to flares or thermal oxidizers used to control emissions exclusively from marine vessel loading terminals subject to Regulation 8, Rule 44.
- 12-11-112 Exemption, Wastewater Treatment Systems:** The provisions of this rule shall not apply to thermal oxidizers used to control emissions exclusively from wastewater treatment systems subject to Regulation 8, Rule 8.
- 12-11-113 Exemption, Pumps:** The provisions of this rule shall not apply to thermal oxidizers used to control emissions exclusively from pump seals subject to Regulation 8, Rule 18. This exemption does not apply when emissions from a pump are routed to a flare header.
- 12-11-114 Limited Exemption, Total Hydrocarbon and Methane Composition Monitoring and Reporting:** The provisions of Sections 12-11-401.2, 401.3, 401.5, 502.2 and 502.3 that require monitoring and reporting of total hydrocarbon and methane composition shall not apply to a flare that exclusively burns flexicoker gas with or without supplemental natural gas, provided that the owner or operator demonstrates by weekly sampling and analysis, verified by the APCO, that the methane content and the non-methane content of the vent gas flared are less than 2 percent and 1 percent by volume, respectively.

12-11-200 DEFINITIONS

- 12-11-201 Flare:** A combustion device that uses an open flame to burn combustible gases with combustion air provided by uncontrolled ambient air around the flame. Flares may be either continuous or intermittent and are not equipped with devices for fuel-air mix control or for temperature control. This term includes both ground and elevated flares.
- 12-11-202 Flare Monitoring System:** All sample systems, transducers, transmitters, data acquisition equipment, data recording equipment, video monitoring equipment, and video recording equipment involved in flare monitoring.
- 12-11-203 Flaring:** A high-temperature combustion process used to burn vent gases.
- 12-11-204 Gas:** The state of matter that has neither independent shape nor volume, but tends to expand indefinitely. For the purposes of this rule, "gas" includes aerosols and the terms "gas" and "gases" are interchangeable.
- 12-11-205 Petroleum Refinery:** A facility that processes petroleum, as defined in the North American Industrial Classification Standard No. 32411, and including any associated sulfur recovery plant.
- 12-11-206 Pilot Gas:** The gas used to maintain the presence of a flame for ignition of vent gases.
- 12-11-207 Purge Gas:** The gas used to prevent air backflow in the flare system when there is no vent gas.

- 12-11-208 Sulfur Recovery Plant:** A process unit that processes sulfur and ammonia containing material and produces a final product of elemental sulfur.
- 12-11-209 Thermal Oxidizer:** An enclosed or partially enclosed combustion device that is used to oxidize combustible gases, that generally comes equipped with controls for combustion chamber temperature and often with controls for air/fuel mixture, and that exhausts all combustion products through a vent, duct, or stack so that emissions can be measured directly.
- 12-11-210 Vent Gas:** Any gas directed to a flare excluding assisting air or steam, flare pilot gas, and any continuous purge gases.

12-11-400 ADMINISTRATIVE REQUIREMENTS

- 12-11-401 Flare Data Reporting Requirements:** The owner or operator of a flare shall submit a monthly report to the APCO on or before 30 days after the end of each month for each flare subject to this rule. Only one report is required for a staged or cascading flare system if all flares in the system serve the same header or headers. The report shall be in an electronic format approved by the APCO. Each monthly report shall include all of the following:
- 401.1 The total volumetric flow of vent gas in standard cubic feet for each day and for the month, and, effective for the first full month after the commencement of the monitoring required by Section 12-11-501, for each hour of the month.
 - 401.2 If vent gas composition is monitored using sampling or integrated sampling, total hydrocarbon content as propane by volume, methane content by volume, and, hydrogen sulfide content by volume, for each sample or integrated sample required by Section 12-11-502. If the content of any additional compound or compounds is determined by the analysis of a sample or integrated sample, the content by volume of each additional compound.
 - 401.3 If vent gas composition is monitored by a continuous analyzer or analyzers pursuant to Section 12-11-502, average total hydrocarbon content as propane by volume, average methane content by volume, and, depending upon the analytical method used pursuant to Section 12-11-601, total reduced sulfur content by volume or hydrogen sulfide content by volume of vent gas flared for each hour of the month. If the content of any additional compound or compounds is determined by the continuous analyzer or analyzers, the average content by volume for each additional compound for each hour of the month.
 - 401.4 If the flow monitor installed pursuant to Section 12-11-501 measures molecular weight, the average molecular weight for each hour of the month.
 - 401.5 For any pilot and purge gas used, the type of gas used, the volumetric flow for each day and for the month, and the means used to determine flow.
 - 401.6 For any 24-hour period during which more than 1 million standard cubic feet of vent gas was flared, a description of the flaring including the cause, time of occurrence and duration, the source or equipment from which the vent gas originated, and any measures taken to reduce or eliminate flaring.
 - 401.7 Flare monitoring system downtime periods, including dates and times.
 - 401.8 The archive of images recorded for the month pursuant to Section 12-11-507.
 - 401.9 For each day and for the month provide calculated methane, non-methane and sulfur dioxide emissions. For the purposes of emission calculations only, a flare control efficiency of 98 percent shall be used for hydrocarbon flares, and a flare control efficiency of 93 percent shall be used for flexi-gas flares or if, based on the composition analysis specified in Section 12-11-502, the calculated lower heating value of the vent gas is less than 300 British Thermal Units/Standard Cubic Foot (BTU/SCF).

12-11-402 Flow Verification Report: Effective twelve months after adoption of this rule and every six months thereafter, the owner or operator of a flare shall submit a flow verification report to the APCO for each flare subject to the rule. The flow verification report shall be included in the corresponding monthly report required by Section 12-11-401. Only one report is required for a staged or cascading flare system if all flares in the system serve the same header or headers. The report shall compare flow as measured by the flow monitoring equipment required by Section 12-11-501 and a flow verification pursuant to Section 12-11-602 for the same period or periods of time. The owner or operator shall demonstrate that the flow verification was performed using good engineering practices. If there are no flaring events as described in Section 12-11-401.6 during the preceding six-month period, a flow verification report is not required for that period.

12-11-500 MONITORING AND RECORDS

12-11-501 Vent Gas Flow Monitoring: Effective 180 days after adoption of this rule, the owner or operator of a petroleum refinery shall not operate a flare unless vent gas to the flare is continuously monitored for volumetric flow by a device that meets the following requirements:

- 501.1 The minimum detectible velocity shall be 0.1 foot per second.
- 501.2 The device shall continuously measure the range of flow rates corresponding to velocities from 0.5 to 275 feet per second in the header in which the device is installed.
- 501.3 The device shall have a manufacturer's specified accuracy of $\pm 5\%$ over the range of 1 to 275 feet per second.
- 501.4 The device shall be installed at a location where measured volumetric flow is representative of flow to the flare or to the flare system in the case of a staged or cascading flare system consisting of more than one flare.
- 501.5 Effective 180 days after adoption of this rule, the owner or operator shall provide access for the APCO to verify proper installation and operation of the flare monitoring system.
- 501.6 Effective 18 months after adoption of this rule, the flow monitoring system shall be maintained to be accurate to within $\pm 20\%$ as demonstrated by the flow verification report specified in Section 12-11-402.

12-11-502 Vent Gas Composition Monitoring: The owner or operator of a petroleum refinery shall not operate a flare unless the following requirements are met:

- 502.1 Requirements applicable to all vent gas composition monitoring:
 - 1.1 Vent gas monitored for composition, whether by sampling, integrated sampling or continuous monitoring, shall be taken from a location at which samples are representative of vent gas composition. If flares share a common header, a sample from the header will be deemed representative of vent gas composition for all flares served by the header.
 - 1.2 Effective 90 days after the adoption of this rule, the monitoring system shall provide access for the APCO to collect vent gas samples to verify the analyses required by Section 12-11-502.
- 502.2 Effective 90 days after adoption of this rule and until the requirements of Section 12-11-502.3 are met, the owner or operator shall monitor vent gas composition through sampling that meets the following requirements:
 - 2.1 For each day on which flaring occurs, one sample shall be taken within 30 minutes of the commencement of flaring.
 - 2.2 Samples may be taken from the flare header or from an alternate location at which samples are representative of vent gas composition.
 - 2.3 Samples shall be analyzed pursuant to Section 12-11-601.
- 502.3 Effective 270 days after adoption of this rule, the owner or operator shall monitor vent gas composition using one of the following four methods:

- 3.1 Sampling that meets the following requirements:
 - a. If the flow rate of vent gas flared in any consecutive 15-minute period continuously exceeds 330 standard cubic feet per minute (SCFM), a sample shall be taken within 15 minutes, except that, for flares exclusively serving sulfur or ammonia plants, a sample shall be taken within 1 hour or composition data representing worst-case conditions shall be provided by the owner or operator and verified by the APCO. The sampling frequency thereafter shall be one sample every three hours and shall continue until the flow rate of vent gas flared in any consecutive 15-minute period is continuously 330 SCFM or less. In no case shall a sample be required more frequently than once every 3 hours.
 - b. Samples shall be analyzed pursuant to Section 12-11-601.
- 3.2 Integrated sampling that meets the following requirements:
 - a. If the flow rate of vent gas flared in any consecutive 15 minute period continuously exceeds 330 standard cubic feet per minute (SCFM), integrated sampling shall begin within 15 minutes and shall continue until the flow rate of vent gas flared in any consecutive 15 minute period is continuously 330 SCFM or less.
 - b. Integrated sampling shall consist of a minimum of one aliquot for each 15-minute period until the sample container is full. If sampling is still required pursuant to Section 12-11-502.3.2a, a new sample container shall be placed in service within one hour after the previous container was filled. A sample container shall not be used for a sampling period that exceeds 24 hours.
 - c. Samples shall be analyzed pursuant to Section 12-11-601.
- 3.3 Continuous analyzers that meet the following requirements:
 - a. The analyzers shall continuously monitor for total hydrocarbon, methane, and, depending upon the analytical method used pursuant to Section 12-11-601, hydrogen sulfide or total reduced sulfur.
 - b. The hydrocarbon analyzer shall have a full-scale range of 100% total hydrocarbon.
 - c. Each analyzer shall be maintained to be accurate to within 20% when compared to any field accuracy tests or to within 5% of full scale.
- 3.4 A continuous analyzer employing gas chromatography that meets the following requirements:
 - a. The gas chromatography system shall monitor for total hydrocarbon, methane, and hydrogen sulfide.
 - b. The gas chromatography system shall be maintained to be accurate to within 5% of full scale.

12-11-503 Pilot Monitoring: Any flare subject to this rule must be equipped and operated with an automatic igniter or a continuous burning pilot, which must be maintained in good working order. If a pilot flame is employed, the flame shall be monitored with a device to detect the presence of the pilot flame. If an electric arc ignition system is employed, the system shall pulse on detection of loss of pilot flame and until the pilot flame is reestablished.

12-11-504 Pilot and Purge Gas Monitoring: The owner or operator of a petroleum refinery shall not operate a flare unless (1) volumetric flows of purge and pilot gases are monitored by flow measuring devices, or (2) other parameters are monitored so that volumetric flows of pilot and purge gas may be calculated based on pilot design and the parameters monitored.

12-11-505 Recordkeeping Requirements: Except as provided in Section 12-11-507, the owner or operator of a flare shall maintain records for all the information required to

be monitored for a period of five years and make such records available to the APCO upon request.

12-11-506 General Monitoring Requirements: Persons responsible for monitoring subject to this rule shall comply with the following:

- 506.1 Periods of flare monitoring system inoperation greater than 24 continuous hours shall be reported by the following working day, followed by notification of resumption of monitoring. Adequate proof of expeditious repair shall be furnished to the APCO for downtime in excess of fifteen consecutive days. Periods of inoperation of the vent gas flow monitoring required by Section 12-11-501 shall not exceed 30 days per calendar year. Periods of inoperation of vent gas composition monitoring specified in Sections 12-11-502.3.2 (integrated sampling) and 12-11-502.3.4 (gas chromatography) shall not exceed 30 days per calendar year. Effective 450 days after the adoption of this rule, periods of inoperation of the vent gas composition monitoring specified in Section 12-11-502.3.3 (continuous analyzers) shall not exceed 30 days per calendar year per analyzer. Periods of inoperation of video monitoring specified in Section 12-11-507 shall not exceed 30 days per calendar year.
- 506.2 During periods of inoperation of continuous analyzers or auto-samplers installed pursuant to Section 12-11-502, persons responsible for monitoring shall take samples as required by Section 12-11-502.2.1. During periods of inoperation of flow monitors required by Section 12-11-501, flow shall be calculated using good engineering practices.
- 506.3 The person(s) responsible for monitors subject to this rule shall maintain and calibrate all required monitors and recording devices in accordance with the applicable manufacturer's specifications. In order to claim that a manufacturer's specification is not applicable, the person responsible for emissions must have, and follow, a written maintenance policy that was developed for the device in question. The written policy must explain and justify the difference between the written procedure and the manufacturer's procedure.
- 506.4 Data Recording System: All in-line continuous analyzer and flow monitoring data must be continuously recorded by an electronic data acquisition system capable of one-minute averages. Flow monitoring data shall be recorded as one-minute averages.

12-11-507 Video Monitoring: For each flare equipped with video monitoring capability as of January 1, 2003, the owner or operator of a flare subject to this rule shall, effective 180 days after adoption of this rule, install and maintain equipment that records a real-time digital image of the flare and flame at a frame rate of no less than 1 frame per minute. The recorded image of the flare shall be of sufficient size, contrast, and resolution to be readily apparent in the overall image or frame. The image shall include an embedded date and time stamp. The equipment shall archive the images for each 24-hour period. Effective 180 days after adoption of this rule, for any flare for which the report required by Section 12-11-401 shows that more than 1 million standard cubic feet of vent gas was flared in any 24-hour period, the owner or operator of the flare shall, within 90 days after the end of the month covered by the report, meet the same requirements as those imposed by this Section for flares with existing video monitoring capability.

12-11-600 MANUAL OF PROCEDURES

12-11-601 Testing, Sampling, and Analytical Methods:

- 601.1 Samples and integrated samples shall be analyzed using the following test methods, or latest revision, where applicable:

- 1.1 Total hydrocarbon content and methane content of vent gas shall be determined using ASTM Method D1945-96, ASTM Method UOP 539-97, or EPA Method 18.
 - 1.2 Hydrogen sulfide content of vent gas shall be determined using ASTM Method D1945-96 or ASTM Method UOP 539-97.
 - 1.3 Any alternative method to the above methods if approved by the APCO and EPA.
- 601.2 Except as provided in Section 12-11-601.3, if vent gas composition is monitored using continuous analyzers, the analyzers shall employ the following methods, or latest revision, where applicable:
- 2.1 Total hydrocarbon content and methane content of vent gas shall be determined using EPA Method 25A or 25B.
 - 2.2 Total reduced sulfur content of vent gas shall be determined using ASTM Method D4468-85.
 - 2.3 Hydrogen sulfide content shall be determined using ASTM Method D4084-94.
 - 2.4 Any alternative method to the above methods if approved by the APCO and EPA.
- 601.3 If vent gas composition is monitored with a continuous analyzer employing gas chromatography, the following requirements shall be met:
- 3.1 ASTM Method D1945-96 or latest revision, or ASTM Method UOP 539-97 or latest revision shall be used.
 - 3.2 The system shall analyze samples for total hydrocarbon content, methane content, and hydrogen sulfide content.
 - 3.3 The minimum sampling frequency shall be one sample every 30 minutes.
 - 3.4 Any alternative method to the above methods if approved by the APCO and EPA.

12-11-602 Flow Verification Test Methods: For purposes of the semi-annual verification required by Section 12-11-402, vent gas flow shall be determined using one or more of the following methods:

- 602.1 District Manual of Procedures, Volume IV, ST-17 and ST-18;
- 602.2 EPA Methods 1 and 2;
- 602.3 Other flow monitoring devices or process monitors.
- 602.4 Any verification method recommended by the manufacturer of the flow monitoring equipment installed pursuant to Section 12-11-501.
- 602.5 Tracer gas dilution or velocity.
- 602.6 Any alternative method approved by the APCO and EPA.

See
Call no.:

93 01241

**REGULATION 13
TRANSPORTATION CONTROL MEASURES
RULE 1
TRIP REDUCTION REQUIREMENTS FOR LARGE EMPLOYERS**

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REGULATION 13
TRANSPORTATION CONTROL MEASURES
RULE 1
TRIP REDUCTION REQUIREMENTS FOR LARGE EMPLOYERS
Adopted December 16, 1992

****[NOTE: TERMS IN ITALIC PRINT ARE DEFINED IN SECTION 200 OF THIS RULE.]****

13-1-100 GENERAL

13-1-101 Description: The purpose of this rule is to improve ambient air quality by reducing air pollutant emissions that result from *vehicle commute trips* to *work sites* with 100 or more *employees*.

13-1-102 Applicability: This rule applies to all public and private *employers* with 100 or more *employees* at a *work site*. This rule applies only to *work sites* with 100 or more *employees*. If an *employer* has 100 or more *employees* but no single *work site* with 100 or more *employees*, this rule does not apply to that *employer*. For purposes of determining the applicability of this rule, the number of *employees* at a *work site* is determined as the maximum number of *employees* reporting to that *work site* on any single week day Monday through Friday during the current calendar or fiscal year. Alternatively, to determine the applicability of this rule to an individual *work site*, an *employer* may calculate an average daily *employee* count for the *work site* by summing the total number of *employees* who work each business day during the 90 day calendar quarter period of maximum employment at the *work site* for the calendar year, and dividing this sum by the number of business days in that 90 day period. (Adopted December 16, 1992; Amended March 15, 1995)

13-1-103 Deleted March 15, 1995

13-1-104 Delegated Program - Procedure: *Local jurisdictions* may request delegation at any time in accordance with the following procedures:

104.1 The *local jurisdiction* adopts or revises its trip reduction ordinance to meet the requirements of Subsections 13-1-302.2 and 302.3 as necessary or conducts a demonstration pursuant to Subsection 13-1-302.4.

104.2 The *local jurisdiction* submits a delegation request and plan pursuant to Subsection 13-1-302.1 to the APCO.

104.3 The APCO will finalize delegation agreements with *local jurisdictions*; such agreements will specify procedures to review *local jurisdiction* performance.

104.4 Under a *delegated program*, all *employer* submittals and notifications are to be made to the *local jurisdiction* and not to the APCO except for multiple site employers who exercise their option to report directly to the District pursuant to California Health and Safety Code Section 40717(e)(4).

104.5 The District will delegate its authority over State, federal, and other government agencies to the *local jurisdiction* pursuant to California Health and Safety Code Sections 40717(e) and 40233(b).

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-105 Exemption - Local Jurisdiction Delegated Program: *Employers* are exempt from the District's implementation of this rule if they are subject to the requirements of a *local jurisdiction* ordinance that has received delegation pursuant to Section 13-1-302.

13-1-106 Exemption - Employee Minimum Level: A *work site* of 100 or more *employees* where less than 50 of these *employees* start work during the *peak period* is exempt from all requirements of this rule except for the registration requirement. Public and private *employers* must register these *work sites* pursuant to Section 13-1-405. To determine the number of *employees* who start work during the *peak period*, an *employer* may calculate an average daily count of *peak period employees* for the *work site* by summing the total number of *employees* who start work each week day during the *peak period* for the 90 day calendar quarter of maximum employment at the *work site* for the calendar year, and dividing this sum by the number of week days in that 90 day period. (Adopted December 16, 1992; Amended March 15, 1995)

13-1-107 Exemption - Performance Objectives Achieved: *Employers* may qualify for an exemption from the requirements of this rule as specified in this section.

107.1 *Work sites* that achieve the 1999 performance objectives specified in Section 13-1-112 as demonstrated pursuant to Section 13-1-406 are exempt from all other requirements of this rule except for this section.

107.2 *Work sites* that meet the requirements of Subsection 13-1-107.1 must submit to the APCO, in a format approved by the APCO, a listing of the measures or reasons for achieving the 1999 performance objectives.

107.3 *Work sites* that meet the requirements of Subsection 13-1-107.1 must demonstrate continued achievement of the 1999 performance objectives by conducting an *employee transportation survey* pursuant to Section 13-1-406 once every three years.

107.4 *Work sites* that do not continue to demonstrate achievement of the 1999 performance objectives pursuant to Subsection 13-1-107.3 no longer qualify for the exemption provided by this section and become subject to the requirements of this rule at that time.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-108 Exemption - Construction Site: Construction sites are exempt from the requirements of this rule. For purposes of this section: 1) construction means the on-site fabrication, erection, or installation of a physical structure such as a building, roadway, bridge, etc. and 2) site has the same meaning as *work site*.

13-1-109 Confidentiality: Any information submitted pursuant to this rule which has been designated as constituting a "trade secret" shall be provided the protection from disclosure which is set forth in the District's Guidelines for Public Access to Records.

109.1 The APCO will treat the information and data specified in this subsection as "trade secret":

- a. Individual *employee transportation survey* responses, records, and results submitted pursuant to Section 13-1-406.
- b. Budget information submitted pursuant to Section 13-1-408.

- 109.2 a. Both aggregate and *work site* performance objective results for an *employer* shall be within the public domain.
- b. Aggregate and generic budget information for trip reduction plans and measures shall be within the public domain.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-110 Collective Bargaining Disclaimer: The requirements of this rule do not absolve an *employer* or other party from any obligation under an existing collective bargaining agreement with *employees* or any provision of law. The *APCO* shall maintain neutrality with respect to any negotiations between an *employer* and its *employees*.

13-1-111 APCO Authorization: In those *local jurisdictions* where there is not a *delegated program* pursuant to Section 13-1-302, the *APCO* is authorized to:

- 111.1 Redefine *zone* boundaries after conducting a public review process with affected and interested parties.
- 111.2 Approve multi-*employer* performance objective averaging based upon data generated by each *employer* (or *employers* together when conducting a joint *employee transportation survey*) pursuant to Section 13-1-406 and submitted to the *APCO* to demonstrate that the performance objectives contained in Section 13-1-112 are achieved. The *APCO* may only approve such averaging when the two or more *employers* occupy the same *work site* or adjacent *work sites* within the same *zone*.
- 111.3 Allow credit in the *AVR* or *VER* calculation for *compressed work week* schedules that eliminate round-trip *commute trips* less frequently than once every two weeks.
- 111.4 Exempt *work sites* from all requirements of this rule if the *work site* meets the *employee* threshold stated in Section 13-1-102 because it employs persons employed under special certificates issued by the Secretary of the U.S. Department of Labor pursuant to Section 14(c) of the Fair Labor Standards Act and these persons cannot drive to work.
- 111.5 Approve alternative methods to fulfill the *employee transportation survey* requirement of Section 13-1-406 when such methods provide verifiable data to calculate *work site AVR* or *VER* consistent with Section 13-1-601 and District guidance. Proposals submitted pursuant to this Subsection must be submitted at least sixty (60) days prior to the planned *survey week*.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-112 Performance Objectives: Performance objectives are expressed in terms of *AVR* and *VER*. *Employers* have the option of reporting performance in terms of either *AVR* or *VER* or both.

AVR Performance Objectives and Year

<i>Zone</i>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>
<i>Zone 1</i>	1.65	1.80	2.00	2.20	2.50	2.50
<i>Zone 2</i>	1.26	1.32	1.38	1.44	1.50	1.50
<i>Zone 3</i>	1.15	1.20	1.25	1.30	1.35	1.35
<i>Zone 4</i>	1.10	1.15	1.20	1.25	1.30	1.30

<i>Zone</i>	VER Performance Objectives and Year					
	1994	1995	1996	1997	1998	1999
<i>Zone 1</i>	0.61	0.56	0.50	0.45	0.40	0.40
<i>Zone 2</i>	0.79	0.76	0.72	0.69	0.67	0.67
<i>Zone 3</i>	0.87	0.83	0.80	0.77	0.74	0.74
<i>Zone 4</i>	0.91	0.87	0.83	0.80	0.77	0.77

112.1 The *work site* AVR or VER is determined from the *employee transportation survey* conducted pursuant to Section 13-1-406.

112.2 *Employers* with *work sites* that do not achieve the performance objectives in this section shall submit an *Employer Trip Reduction Plan* pursuant to Section 13-1-408.

112.3 Failure of a *work site* to achieve the performance objectives listed above is not a violation of this rule.

(Adopted December 16, 1992; Amended and Renumbered March 15, 1995)

13-1-200 DEFINITIONS

13-1-201 Air Pollution Control Officer (APCO): The Air Pollution Control Officer of the Bay Area Air Quality Management District (District) or the designee thereof.

13-1-202 Average Vehicle Ridership (AVR): AVR is the number of employee-days summed over the *survey week* divided by the number of *vehicle* trips summed over the *survey week* for *employees* who start work during the *peak period* as calculated pursuant to Section 13-1-601. Section 13-1-601 specifies how employee-days and vehicle trips are counted for purposes of calculating AVR.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-203 Buspool: A *vehicle* occupied by sixteen (16) or more people traveling together between their residence and their *work site* or destination for the majority of the total trip distance. *Employees* who work for different *employers*, as well as non-employed people, are included within this definition as long as they are in the *vehicle* for the majority of the total trip distance.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-204 Carpool: A *vehicle* occupied by two (2) to six (6) people traveling together between their residence and their *work site* or destination for the majority of the total trip distance. *Employees* who work for different *employers*, as well as non-employed people, are included within this definition as long as they are in the *vehicle* for the majority of the total trip distance.

13-1-205 Commute Trip: The trip made by an *employee* from home to the *work site*. The commute trip may include stops between home and the *work site*.

13-1-206 Compressed Work Week: A regular full-time work schedule which eliminates at least one round-trip *commute trip* (both home-to-work and work-to-home) at least once every two (2) weeks. Examples include, but are not limited to working three twelve-hour days (3/36) or four ten-hour days (4/40) within a one week period; or eight nine-hour days and one eight-hour day (9/80) within a two week period. *Employers* are eligible for *compressed work week* credit pursuant to Section 13-1-601 only for *employees* who work at least 35 hours per week or 70 hours over a two-week period and who normally report to the work site.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-207 Delegated Program: Implementation of this rule by a *local jurisdiction* through the APCO approval of a delegation request from a *local jurisdiction* pursuant to Sections 13-1-104 and 302.

- 13-1-208** (Deleted March 15, 1995)
- 13-1-209** **Employee:** Any person employed by a person(s), firm, business, educational institution, non-profit agency or corporation, government or other entity conducting *work activity* for an *employer* 20 or more hours per week on a regular full-time or part-time basis. The term includes *independent contractors*. The term excludes *field construction workers*, *field personnel*, *seasonal/temporary employees*, and *volunteers*. (Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-210** **Employee Transportation Coordinator (ETC):** An *employee*, other individual, or entity appointed by an *employer* to develop, market, administer, and monitor the *Employer Trip Reduction Program* or *Employer Trip Reduction Plan* on a full or part-time basis.
- 13-1-211** **Employee Transportation Survey:** An APCO-approved questionnaire distributed by *employers* to *employees* designed to provide sufficient information to calculate AVR or VER for the *work site* pursuant to Sections 13-1-406 and 601.
- 13-1-212** **Employer:** Any person(s), firm, business, educational institution, government agency, non-profit agency or corporation, or other entity which employs persons. A city, county, or city and county is a single *employer* for purposes of this rule, not individual departments or agencies of the city, county, or city and county. Individual departments or agencies of the State of California and the federal government are separate *employers* for purposes of this rule. Several subsidiaries or units that occupy the same *work site* and report to one common governing board or governing entity or that function as one corporate unit are considered to be one *employer*. (Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-213** **Employer Program Manager:** An *employee* with authority to develop budget proposals and to expend approved budgets who is responsible for the implementation of the *Employer Trip Reduction Program* or *Employer Trip Reduction Plan* and for fulfilling the requirements of this rule. (Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-214** Deleted March 15, 1995
- 13-1-215** **Employer Trip Reduction Plan:** A document describing in detail the *Employer Trip Reduction Program*, including an implementation schedule and budget, which is submitted to the APCO for review and approval pursuant to Section 13-1-408. (Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-216** **Employer Trip Reduction Program:** A group of measures developed and implemented by an *employer* that are designed to provide transportation information, assistance, and incentives to *employees*. The purpose of such measures is to reduce the number of motor *vehicles* driven to the *work site*. The District has published and will update its Guide to Employer Trip Reduction Programs which describes types of trip reduction measures. (Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-217** **Field Construction Worker:** An *employee* who reports directly to work at a construction site a majority of the *employee's* working time. (Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-218** **Field Personnel:** *Employees* who spend 20 percent or less of their work-time at the *work site* and who do not report to the *work site* during the *peak period* for pick-up and dispatch of an *employer-provided vehicle*.
- 13-1-219** **Independent Contractor:** An individual who enters into a direct written contract or agreement with an *employer* to perform certain services. The period of the contract or agreement is at least ninety (90) continuous days or is open-ended.

- 13-1-220 Local Jurisdiction:** A city, county, or public agency, including a public agency formed through a Joint Powers Agreement, with authority to adopt, implement, and enforce an *employer* trip reduction ordinance, rule, or regulation.
(Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-221 Peak Period:** The time from 6:00 a.m. through 10:00 a.m. Monday through Friday inclusive.
- 13-1-222 Seasonal/Temporary Employee:** A person who is employed for less than a continuous 90-day period. For persons employed in agriculture crop production or processing, the period of employment is 120 days.
(Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-223 Single-Occupant Vehicle:** A *vehicle* occupied by one *employee*.
- 13-1-224 Survey Week:** A regular five day Monday through Friday (inclusive) work-week. The *survey week* for *work sites* with Saturday and Sunday work schedules will include only those work days Monday through Friday. The *survey week* cannot contain a federal, State, or local holiday which is observed by the *employer*. A *survey week* that meets the above criteria is to be selected by the *employer* during the months January through November for the *employee transportation surveys* required by Section 13-1-406. The *survey week* cannot be Rideshare Week. The *survey week* cannot include any special event or campaign to promote the use of commute alternatives in which the *employer* participates, such as Bike to Work Day, an on-site transportation fair, etc. The *survey week* must be a week in which more than 50 percent of the annual maximum number of *employees* at the *work site* are scheduled to report to work.
(Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-225 Telecommuting:** A system of working at home, off-site, or at a telecommuting center, for a full work day, that eliminates the trip to the work site or reduces travel distance by 50 percent or more.
(Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-226 Transportation Management Association:** An organization through which developers, property managers, *employers*, and/or *local jurisdictions* cooperate in designing, implementing, and assessing *Employer Trip Reduction Programs* or other transportation demand or system management programs and measures.
- 13-1-227 Vanpool:** A *vehicle* occupied by seven (7) to fifteen (15) people traveling together between their residence and their *work site* or destination for the majority of the total trip distance. *Employees* who work for different *employers*, as well as non-employed people, are included within this definition as long as they are in the *vehicle* for the majority of the total trip distance.
(Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-228 Vehicle:** A device by which any person or property may be propelled, moved, or drawn upon a highway, except the following: 1) a device moved exclusively by human power, 2) a device used exclusively upon stationary rails or tracks, 3) buses used for public or private transit. Examples of *vehicles* include, but are not limited to, passenger cars, motorcycles, vans, and pickup trucks.
- 13-1-229 Vehicle Employee Ratio (VER):** *VER* is the number of *vehicle* trips summed over the *survey week* divided by the number of employee-days summed over the *survey week* for *employees* who start work during the *peak period* as calculated pursuant to Section 13-1-601. Section 13-1-601 specifies how employee-days and vehicle trips are counted for purposes of calculating *VER*.
(Adopted December 16, 1992; Amended March 15, 1995)

- 13-1-230 Volunteer:** A person who does not receive wages for *work activity* at the *work site*.
(Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-231 Work Activity:** Any activity for which an *employee* receives remuneration from an *employer*. *Telecommuting* is a *work activity*.
- 13-1-232 Work Site:** Any property, real or personal, which is being operated, utilized, maintained, or owned by an *employer* as part of an identifiable enterprise, including a structure, building, portion of a building, or grouping of buildings that are in actual physical contact, adjacent, or are separated solely by a private or public roadway or other private or public right-of-way, and that are occupied by the same *employer*. If two or more *employers* each have 100 or more *employees* at a single *work site*, then that *work site* is considered a separate *work site* for each *employer*. An *employer* has the option to combine into a single site two or more proximate affected work sites (within one quarter mile walking distance) for purposes of this rule.
(Adopted December 16, 1992; Amended March 15, 1995)
- 13-1-233 Zone:** A geographical area within the District where the performance objectives contained in Section 13-1-112 apply to *employers* with *work sites* located within that *zone*.
- Zone 1 - Northeastern San Francisco:** Includes the northeastern portion of the City and County of San Francisco bounded by Van Ness Avenue from Aquatic Park south to Bay Street; Bay Street from Van Ness Avenue west to Gough Street; Gough Street from Bay Street south to Mission Street; Otis Street from Mission Street south to 13th Street; 13th Street from Otis Street east to Division Street; Division Street from 13th Street east to DeHaro Street; DeHaro Street from Division Street south to Berry Street; Berry Street from DeHaro Street northeast to the San Francisco Bay. All employment sites within the boundaries as well as employment sites with street addresses or frontage on either side of the boundaries listed above are included in *Zone 1*.
- Zone 2 - High Density Urban:** Consists of three separate areas:
- 1) All areas of the City and County of San Francisco not contained in *Zone 1*
 - 2) Downtown Oakland, as defined below
 - 3) Downtown Berkeley, as defined below
- Downtown Oakland** is the area of the City of Oakland bounded by: Castro Street from 7th Street north to M. L. King Jr. Way; M. L. King Jr. Way from Castro Street north to West Grand Avenue; West Grand Avenue from M. L. King Jr. Way east to Broadway; Grand Avenue from Broadway east to Harrison Street; Harrison Street from Grand Avenue south to Lakeside Drive; Lakeside Drive from Harrison Street south to 14th Street; Oak Street from 14th Street south to 7th Street; 7th Street from Oak Street west to Castro Street. All employment sites within the boundaries as well as employment sites with street addresses or frontage on either side of the boundaries described above are included in *Zone 2*.
- Downtown Berkeley** comprises the main University of California campus (including Lawrence Berkeley Lab, the Cyclotron and the Lawrence Hall of Science) and the adjacent area of the City of Berkeley bounded by: M. L. King Jr. Way from Dwight Way north to Hearst Avenue; Hearst Avenue from M. L. King Jr. Way east to Oxford Street; Oxford Street from Hearst Avenue south to Dwight Way; Dwight Way from Oxford Street west to M. L. King Jr. Way. All employment sites within the boundaries as well as

employment sites with street addresses or frontage on either side of the boundaries described above are included in *Zone 2*.

Zone 3 - Southern Counties: San Mateo, Santa Clara, and Contra Costa Counties, the portion of Alameda Counties, and the portion of Alameda County not contained in *Zone 2*

Zone 4 - Northern Counties: Marin and Napa Counties, and those portions of Sonoma and Solano Counties within the District.

13-1-234 Contractor Employee: Any person employed by an employment service or other entity that reports to a *work site* other than the employment service or other entity *work site* under a contractual arrangement with another *employer*. For purposes of this rule, these *employees* are counted as *employees* of the employment service or other entity. (Adopted March 15, 1995)

13-1-235 Alternative Emission Reduction Program (AERP): Measures or strategies developed and implemented by an *employer* which reduce motor *vehicle* emissions but not necessarily motor *vehicle commute trips* made by *peak period employees*. (Adopted March 15, 1995)

13-1-300 STANDARDS

13-1-301 Deleted March 15, 1995

13-1-302 Delegated Program: *Local jurisdictions* shall be delegated responsibility for implementation of this rule by the *APCO* if the following criteria are met:

- 302.1 The *local jurisdiction* submits a plan to the *APCO* that provides adequate resources to adopt, implement, and enforce *employer-based* trip reduction requirements, or submits a demonstration, commitment, and plan pursuant to Subsection 13-1-302.4.
- 302.2 The *local jurisdiction* adopts a trip reduction ordinance that includes, at a minimum, all those provisions contained in Sections 13-1-102, 112, 202, 209, 212, 221, 224, 229, 232, 233, and 403.
- 302.3 The *local jurisdiction* adopted trip reduction ordinance includes requirements to:
 - a. conduct *employee transportation surveys* (Section 13-1-406)
 - b. review and approve/disapprove *Employer Trip Reduction Plans* when performance objectives are not achieved (Section 13-1-408)
 - c. appeal plan disapproval (Section 13-1-409)
 - d. define violations
 - e. assess penalties
- 302.4 A *local jurisdiction*, in lieu of meeting the requirements of Subsections 13-1-302.2 and 302.3, may provide a demonstration that the final 1999 performance objectives are currently achieved on an aggregate basis for all applicable *work sites* within its jurisdiction. Such demonstration must utilize a methodology approved by the *APCO* and a commitment and plan to repeat the demonstration once every three (3) years. If the *local jurisdiction* contains more than one *zone*, the demonstration submitted pursuant to this subsection shall be evaluated based upon the results for each *zone* or part thereof that is within the *local jurisdiction*. (Adopted December 16, 1992; Amended March 15, 1995)

13-1-400 ADMINISTRATIVE REQUIREMENTS

13-1-401 Effective Dates: Except as otherwise noted, all requirements of this rule are effective July 1, 1994. Subsequent amendments become effective upon adoption unless a future effective date for the amendment is specified.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-402 Employee Notification: An *employer* shall facilitate the participation of employees and employee organizations in the development of *Employer Trip Reduction Programs* and *Employer Trip Reduction Plans* by providing the following information to its *employees* at the times specified below:

- 402.1 Information explaining the requirements and applicability of this rule to the *employer* and its *work site(s)* prior to or at the time of registration pursuant to Section 13-1-405.
- 402.2 The content and implementation schedule of the *Employer Trip Reduction Program* required by Section 13-1-407 during its development.
- 402.3 The content, implementation schedule, and availability of the *Employer Trip Reduction Plan* required by Section 13-1-408, as applicable, at least thirty (30) days prior to the submittal of the *Employer Trip Reduction Plan* to the APCO.
- 402.4 Notification may be provided through *employee* bulletins, notices posted on bulletin boards, articles in any newsletter generally circulated or provided to *employees*, or any other reasonable means to assure that *employees* have adequate opportunity to participate in the development of trip reduction programs and measures, and are informed about the full range of trip reduction programs and measures available at the *work site*.
- 402.5 The notice shall identify the *Employee Transportation Coordinator* and/or the *Employer Program Manager* within the organization to whom comments and suggestions can be submitted and questions addressed.

13-1-403 Employee Transportation Coordinator (ETC): *Employers* must have an ETC(s) as specified within this section.

- 403.1 *Employers* shall appoint an ETC for each affected *work site*. *Employers* with multiple affected *work sites* within the District may appoint one ETC for more than one *work site*, even when these *work sites* are located in different *zones*.
- 403.2 ETCs must complete an APCO-certified training curriculum by April 1, 1995 or within six (6) months of appointment when appointed after March 1, 1995.
- 403.3 The *employer* may apply to the APCO for a waiver from the training requirement of Subsection 13-1-403.2 when an ETC has one or more years of experience in trip reduction or equivalent skills.
- 403.4 An ETC may also serve as the *Employer Program Manager* provided that the individual meets the criteria specified in Section 13-1-213.
- 403.5 *Employers* must notify the District in writing identifying the new *Employee Transportation Coordinator* within 30 days after a change in the *Employee Transportation Coordinator*.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-404 Employer Program Manager: *Employers must have an Employer Program Manager as specified in this section.*

- 404.1 *Employers shall appoint an Employer Program Manager. Employers with multiple affected work sites within the District may appoint one Employer Program Manager for more than one work site, even when these work sites are located in different zones.*
- 404.2 *An Employer Program Manager may also serve as the ETC provided that the individual meets the requirements of Section 13-1-403.*
- 404.3 *Employers must notify the District in writing identifying the new Employer Program Manager within 30 days after a change in the Employer Program Manager.*

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-405 Registration Requirement: *Public and private employers with 100 or more employees at a single work site within the District shall register with the APCO in accordance with this section.*

- 405.1 *Registration shall be accomplished by completing and submitting a Work Site Registration Form as provided by the APCO.*
- 405.2 *Employers who become subject to this rule subsequent to July 1, 1994 due to an increase in employees or the establishment of a new or expanded work site shall register with the APCO within ninety (90) days of becoming subject to this rule.*
- 405.3 *Deleted March 15, 1995*
- 405.4 *Employers who were subject to this rule on or before July 1, 1994 must register with the APCO by September 30, 1994.*

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-406 Employee Transportation Surveys: *Employers must conduct employee transportation surveys as specified in this section to establish whether the performance objectives listed in Section 13-1-112 have been achieved.*

- 406.1 *An employer shall conduct an employee transportation survey during an eligible survey week within the time frame specified by the APCO consistent with the procedure contained in Section 13-1-601.*
- 406.2 *An employer has the option of processing the employee transportation survey forms itself, submitting the survey forms to the District for processing, or having another entity process the survey forms. Survey processing must be consistent with the procedures contained in Section 13-1-601, and verifiable records must be maintained.*
 - a. *Employee transportation survey results are to be submitted to the APCO within 90 days of the survey week when the employer or another entity processes the survey forms.*
 - b. *Employee transportation survey forms are to be submitted to the APCO within 45 days of the survey week when the District processes the survey forms.*
- 406.3 *An employer may use a Random Sample Employee Survey Method as approved by the APCO consistent with Section 13-1-602 for work sites where 400 or more employees start work during the peak period.*
- 406.4 *The APCO will notify employers of the year for the initial and subsequent surveys. Effective July 1, 1995, employers may choose any eligible survey week during the calendar year specified by the APCO.*

- 406.5 *Employee transportation surveys* are to be conducted annually unless a *work site* demonstrates that a future year performance objective is achieved. These *work sites* are required to survey every other year as long as future year performance objectives continue to be achieved.
- 406.6 An *employer* shall not offer any special incentives or disincentives in addition to its regular *Employer Trip Reduction Program* during the *survey week*. This limitation does not apply to activities undertaken by an *employer* in response to a District forecast exceedance day, e.g. the "Spare the Air" Campaign. *Employers* shall in no way encourage *employees* to use commute alternatives for the specific purpose of reducing *vehicle* trips only during the *survey week*.
- 406.7 Deleted March 15, 1995
- 406.8 Deleted March 15, 1995

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-407 Employer Trip Reduction Program: *Employers* must have an *Employer Trip Reduction Program* as specified in this section.

- 407.1 Within six months of the end of the *survey week* for the first *employee transportation survey* conducted pursuant to Section 13-1-406, *employers* shall develop and implement an *Employer Trip Reduction Program*.
- 407.2 Deleted March 15, 1995
- 407.3 An *Employer Trip Reduction Program* must include at a minimum the following trip reduction measures:
- a. marketing commute alternatives
 - b. ridematching assistance
 - c. transit information (when the *work site* is served by public transit - within one quarter mile walking distance - or the *work site* is served by a privately or publicly funded shuttle to transit)

(Adopted December 16, 1992; Amended March 15, 1995)

3-1-408 Requirement to Submit Employer Trip Reduction Plan: *Employers* that do not achieve the performance objectives established in Section 13-1-112 for the applicable calendar year in which the *employee transportation survey* was conducted at any *work site* subject to this rule shall prepare and submit an *Employer Trip Reduction Plan* for that *work site* to the APCO within 120 days of a determination that the performance objective was not achieved. An *employer* may submit a plan that covers multiple *work sites*. The APCO will issue a determination that the performance objective has not been achieved based upon information received pursuant to Section 13-1-406. The *Employer Trip Reduction Plan* shall be consistent with guidance issued by the APCO.

- 408.1 An *employer* has the option to fulfill the requirement of this section by submitting an *Employer Trip Reduction Plan* that meets the contents specified in Subsection 13-1-408.1(a), (b), or (c).
- a. An *employer* may develop and submit an *Employer Trip Reduction Plan* that includes sufficient trip reduction measures to meet the plan approval criteria specified in Subsection 13-1-408.4.

- b. An *employer* may develop and submit an *Alternative Emission Reduction Program (AERP)* that demonstrates that the measures included in such program will achieve emission reductions from mobile sources equal to or greater than those that would be realized if the annual performance objectives were achieved. An *AERP* may not contain any measures that are required by any federal, State, or local air pollution control measure or regulatory requirement. The requirements of Section 13-1-407 continue to apply to an *employer* who develops and submits an *AERP*.
 - c. An *employer* may develop and submit an *AERP* that combines the elements of Subsections 13-1-408.1 (a) and (b).
- 408.2 The plan shall be submitted by the highest ranking responsible official of the *employer* at the *work site* or each *work site* when a plan is submitted that covers multiple *work sites*.
- 408.3 Deleted March 15, 1995
- 408.4 The *APCO* shall approve and the *employer* shall implement an *Employer Trip Reduction Plan* that includes all reasonable, feasible, and cost effective trip reduction measures that can be expected to bring about significant progress toward achievement of the performance objectives given the constraints of the *work site*, the nature of the *work activity*, and the geographical distribution of *employees* relative to the *work site*; or the *APCO* shall approve an *Alternative Emission Reduction Program* pursuant to Subsections 13-1-408.1 (b), or (c). The *APCO* shall disapprove any plan that does not meet the above specified approval criteria.
- 408.5 An *employer* shall revise and resubmit to the *APCO* any disapproved plan within 90 days of the disapproval. If the revised plan is disapproved, the *employer* has one additional 30-day opportunity to revise and resubmit a plan before final disapproval. Final disapproval is a violation of the rule subject to penalty unless such final disapproval is successfully appealed pursuant to Section 13-1-409.
- 408.6 An *employer* may appeal a final disapproval of its *Employer Trip Reduction Plan* pursuant to Section 13-1-409.
- 408.7 An *employer* subject to this section shall update its *Employer Trip Reduction Plan*, including plans developed pursuant to Subsections 13-1-408.1 (b), or (c) every two years after plan approval until such time as the performance objective is achieved. Such plan updates are to be submitted every two years to the *APCO* on or before the anniversary date of plan approval.
- 408.8 An *employer* subject to this section shall continue to meet the requirements of Sections 13-1-402, 403, 404, 405, 406 and 407.
- 408.9 An *employer* shall revise and resubmit its *Employer Trip Reduction Plan* within 90 days of a final determination that an element of an approved *Employer Trip Reduction Plan* violates any provision of law is issued by an agency or court with jurisdiction to make such determination.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-409 Appeal of Plan Disapproval: An *employer* may appeal a final plan disapproval made pursuant to Section 13-1-408 to the District Hearing Board.

409.1 The *employer* whose plan has received a final disapproval may, within thirty (30) days of such disapproval, request the District Hearing Board to hold a hearing on whether or not the plan was properly disapproved.

409.2 The District Hearing Board shall consider the appeal at a public hearing within sixty (60) days of the filing of the appeal. The Hearing Board may revise or modify the decision of the *APCO* if it determines that the disapproval was erroneous, or the Hearing Board may uphold the decision of the *APCO*.

409.3 The District Hearing Board shall endeavor to calendar hearings on appeals pursuant to this section on days when other matters are also calendared for hearings before the District Hearing Board.

409.4 Deleted March 15, 1995

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-500 MONITORING AND RECORDS

13-1-501 Recordkeeping Requirements: *Employers* must maintain records and documents as specified in this section.

501.1 *Employers* subject to this rule shall maintain and retain records, files, and documentation to establish compliance with Sections 13-1-402, 403, 404, 405, 406, 407, and 408.

501.2 Retention by the *employer* of such records, files, and documentation shall be for three years.

501.3 Such records, files, and documentation shall be made available to the *APCO* during any on-site audit conducted by the District.

13-1-600 MANUAL OF PROCEDURES

13-1-601 Performance Objective Calculation: *AVR* or *VER* for each affected *work site* is to be computed in a manner consistent with the following method.

601.1 The *employer* conducts an *employee transportation survey* during a *survey week*.

601.2 *AVR* or *VER* is calculated for those *employees* who start work or are assigned to the *work site* during the *peak period* of the *survey week*. Alternatively, *employers* have the option to calculate *AVR* or *VER* based upon all *employees* who work or are assigned to the *work site* during the *survey week*.

601.3 If less than 60 percent of the survey forms are returned for processing, or the *employer* conducts a random sample survey pursuant to Section 13-1-602, all survey forms not returned shall be counted as *single occupant vehicles* for purposes of calculating *AVR* or *VER*.

601.4 If 60 percent or more of the survey forms are returned for processing, one-half of those survey forms not returned shall be assumed to have the same *AVR* or *VER* as that calculated from the responses to the surveys returned, and one-half shall be counted as *single occupant vehicles* for purposes of calculating *AVR* or *VER*.

601.5 AVR for the *work site* shall be calculated by dividing the number of "employee-days" summed over the *survey week* by the number of "vehicle trips" summed over the *survey week*.

601.6 VER for the *work site* shall be calculated by dividing the number of "vehicle trips" summed over the *survey week* by the number of "employee-days" summed over the *survey week*.

(a) *Employee-Days* shall be determined as follows:

Each day of the *survey week* that an *employee* starts work during the *peak period* counts as one *employee-day*.

1. *Employees telecommuting* or who are off due to a *compressed work week* schedule are counted toward the total *employee-days*.

2. The following are not counted toward the total *employee-days*:

a. *Employees* on vacation, sick leave, jury duty, or other time-off.

b. *Employees* who report to a different *work site* or an off-site work related activity.

(b) *Vehicle Trips* shall be determined as follows:

A *vehicle* trip is based on the means of transportation used for the greatest distance of an *employee's* home to work *commute trip*.

1. *Single occupant vehicle* (drive alone) equals one (1).

2. *Carpool* equals one (1) divided by the number of people in the *carpool*.

3. *Vanpool* equals one (1) divided by the number of people in the *vanpool*.

4. Motorcycle, moped, motorized scooter, or motor bike equal one (1).

5. Clean-fueled and low or zero emission *vehicles* are counted as less than one *vehicle* trip consistent with guidance issued by the California Air Resources Board and the APCO.

6. The following all equal zero (0) *vehicle* trips:

a. Public transit (bus, light rail, ferry, Caltrain, BART)

b. *Buspool*

c. Bicycle

d. Walking and other non-motorized transportation modes

e. *Telecommuting* (only on the days those *employees* are *telecommuting* for the entire day)

f. *Compressed work week* schedule (only on an *employee's* compressed day(s) off). The maximum number of *compressed work week* days off credit is two per *employee* per week.

601.7 *Employers* with multiple *work sites* within the same *zone* have the option to average individual *work site* AVR or VER, as calculated pursuant to Subsections 601.1 through 601.6 inclusive, to demonstrate that the performance objectives are achieved on an aggregate basis for those *work sites* when the District is implementing the rule. If the *employer* demonstrates that the performance objectives (Section 13-1-112) are achieved using the averaging methodology, then those *work*

sites included in the averaging are not subject to the requirements of Section 13-1-408.

(Adopted December 16, 1992; Amended March 15, 1995)

13-1-602 Random Sample Method: *Employers may perform a random sample employee transportation survey at any work site where 400 or more employees start work during the peak period.*

602.1 The random sample survey method must be approved by the APCO. Any employer which fails to conduct an acceptable random sample survey may be required to perform a survey of all peak period employees.

602.2 All non-respondents in the random sample group will be treated as drive alone commuters (i.e. commuting in a single occupant vehicle) for purposes of calculating the work site AVR or VER. If the number of valid survey responses from peak period employees plus non-respondents is less than the minimum sample size specified in Subsection 13-1-602.3, then the shortfall (i.e. the difference between the minimum sample size and the number of valid responses from peak period employees plus non-respondents) shall be treated as drive alone commuters.

602.3 The size of the random sample depends upon the number of employees who start work during the peak period. The minimum size of the random sample is specified below. The employer may choose to include a larger number of employees in the random sample survey.

Number of Peak Period Employees @ Work Site	Sample Size
400 to 420	200
421 to 440	205
441 to 460	210
461 to 480	214
481 to 500	218
501 to 550	225
551 to 600	235
601 to 650	240
651 to 700	248
701 to 750	255
751 to 800	260
801 to 850	265
851 to 900	270
901 to 950	274
951 to 1000	278
1001 to 1500	300
1501 to 2000	320
2001 to 3000	340
3001 to 4000	350
4001 to 6000	360
6001 to 10,000	370
>10,000	380

602.4 The employer shall retain documentation describing the method used to generate the random sample for at least three years.

(Adopted December 16, 1992; Amended March 15, 1995)

ADOPTED AMENDMENTS TO REGULATION 3 - FEES

[NOTE]

Printed below are those portions of Regulation 3 that were amended or added to the regulation on December 16, 1992 and March 15, 1995 which relate to Regulation 13, Rule 1. The full text of Regulation 3 is available from the District's Public Information Office at (415) 749-4900. Schedule O, Employer Trip Reduction Fees appears in its entirety below.

3-100 GENERAL

- 3-101 Description:** This regulation establishes fees to be charged for Hearing Board filings, for permits, banking, experimental exemption, renewal of permits, the Sher Atmospheric Acidity Protection Act, employee transportation survey processing, employer trip reduction plan review, and employer trip reduction plan appeal.
- 3-106 Exemption, Employer Trip Reduction Fees:** The employer fees listed in Schedule O shall not be collected by the APCO from any school district (K-12). (Adopted March 15, 1995)

3-200 DEFINITIONS

- 3-228 Employer:** See Section 13-1-212 of Regulation 13, Rule 1.
- 3-229 Employee Transportation Survey Processing Fee:** A fee paid at the time of submittal of the employee transportation survey forms required by Regulation 13. The employee transportation survey processing fee is listed in Schedule O. This fee is applicable to all employers required to conduct employee transportation surveys and who submit these survey forms to the APCO for processing pursuant to Regulation 13.
- 3-230 Employer Trip Reduction Plan Review Fee:** A fee paid at the time of submittal of an Employer Trip Reduction Plan pursuant to Section 13-1-408 of Regulation 13, Rule 1. This fee applies both at the time of initial submittal as well as subsequent updates. This fee does not apply to the resubmittal of a disapproved Employer Trip Reduction Plan. The employer trip reduction plan review fee is listed in Schedule O. This fee is applicable to all employers required to submit Employer Trip Reduction Plans pursuant to Regulation 13.
- 3-231 Employer Trip Reduction Plan Appeal Fee:** A fee paid at the time of appeal of a disapproved Employer Trip Reduction Plan pursuant to Section 13-1-409. The employer trip reduction plan appeal fee is listed in Schedule O. This fee is applicable to all employers who file appeals of disapproved Employer Trip Reduction Plans.

3-300 STANDARDS

- 3-321 Employers:** Employers subject to the requirements of Regulation 13 shall pay all applicable fees based on Schedule O. These fees are in addition to permit and other fees authorized to be collected from facilities owned and operated by the employer. Failure to pay these fees shall be subject to the penalties of Section 3-405.

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